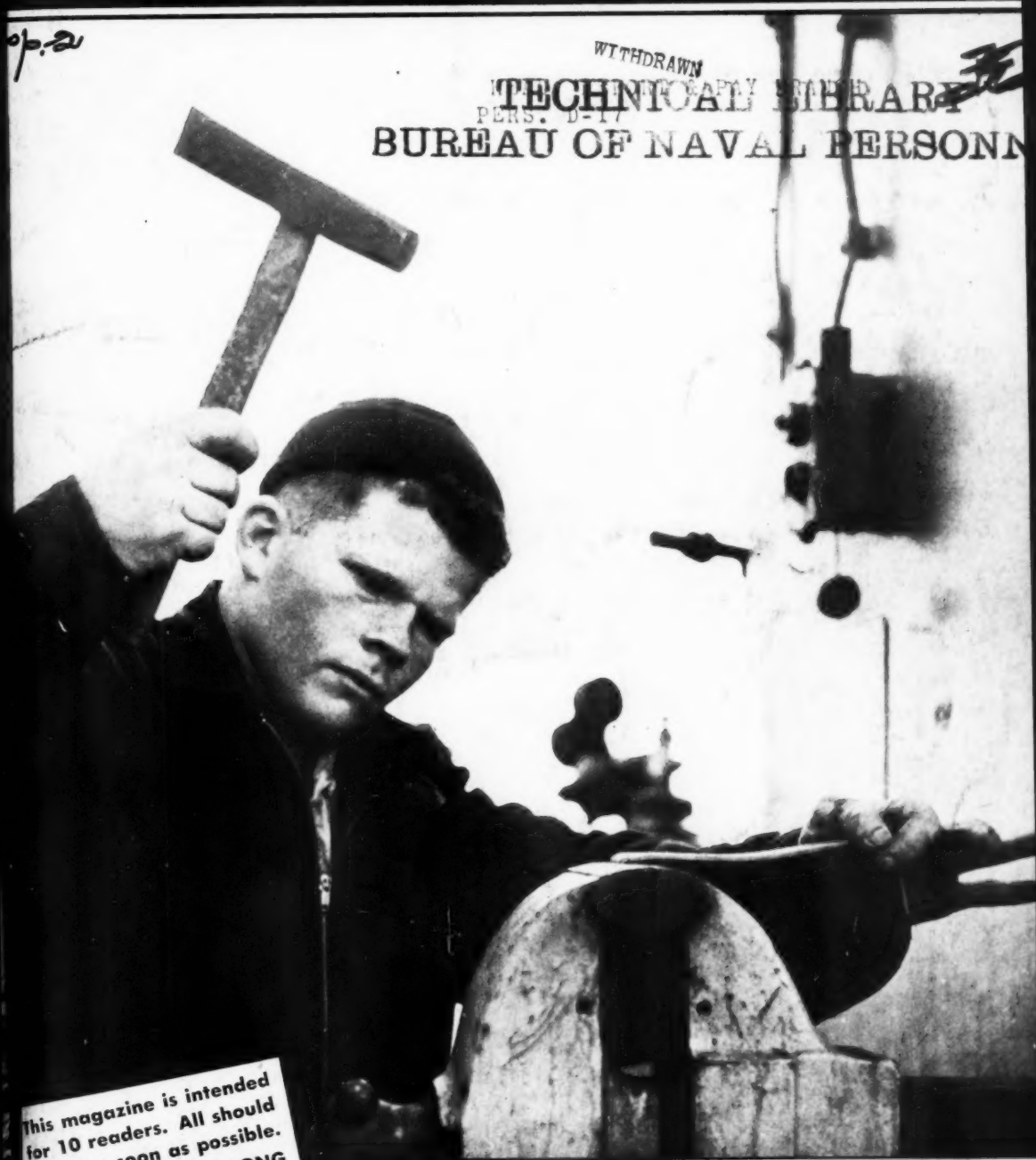


ALL HANDS



This magazine is intended
for 10 readers. All should
see it as soon as possible.
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FEBRUARY 1958





ALL HANDS

THE BUREAU OF NAVAL PERSONNEL INFORMATION BULLETIN

FEBRUARY 1958 Nav-Pers-O NUMBER 493

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TABLE OF CONTENTS

<i>Navy Photography: Phase I</i>	Page
Shooting It Out For the Record	2
They Help the Navy to Fire Straight	6
Eye Doctors for Navy's Cameras	7
<i>Tribute to the Medics</i>	
Corpsmen on the Field of Combat	8
Navy Hospital	12
Navy Nurse	15
Get Set for Space Travel	16
A Nest of Hornets	18
Snow Job	21
Iron Sea Monster	22
Letters to the Editor	23
Passing Honors to USS Arizona	24
<i>Navy Photography: Phase II</i>	
Every Navyman's a Photographer	30
Chart: Make a Pictorial Record of Your Naval Career	32
Today's Navy	34
Construction to Begin on Navy-Marine Memorial Stadium	38
Servicescopes: News of Other Services	42
Bulletin Board	44
You've Got a Lot to Like at Norfolk	44
Enlisted Advancement Tables	48
Your NEC Code May Help You Get Your Choice for New Duty	51
Latest Word on Overseas Transportation for Your Family	53
Tale of the Bolt Who Went Nuts	54
Do You Know the Laws in Your Area on Car Ownership	56
Book Reviews	58
Book Supplement: Fighting the U.S. Navy	59
Taffrail Talk	64

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• FRONT COVER: IRON MAN—James D. Carroll, FN, USN. bends strap iron to make a bracket while repairing forward gun mount of USS Hugh Purvis (DD 709). The destroyer was operating in Atlantic waters off its home port of Newport, R. I.

• AT LEFT: CARRIERS BY THE YARD—San Francisco Naval Shipyard had a lot on deck when Fleet aircraft carriers USS Hancock (CVA 19), left, USS Bennington (CVA 20), right, joined drydocked USS Oriskany (CVA 34) in SFNS.

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MODERN aerial photography stepped forward during the days of WW II, has become important 'eyes' for the Navy.

SHOOTING IT OUT

FROM THE AIR Chung-jojur-ri looked about the same as any other North Korean town. American pilots, headed for other targets, flew over it time after time without even bothering to take a second glance.

Then one day someone got curious about the peaceful-looking cluster of typical Korean houses, and they became the object of a special photo-reconnaissance mission. A Navy photo pilot winged in over the place, "shot it up" with his camera and dropped the exposed film off at the unit's photo lab for processing.

The finished prints were turned over to Intelligence, where photo-interpreters gave them the once-over. Under stereoscopic viewers the pictures soon revealed that there was much more to Chung-jojur-ri than met the naked eye. Instead of peaceful villagers, the place housed an interesting collection of enemy motor vehicles. The walls of several houses had been pulled down to make room for a complete maintenance shop.

It didn't take long for planes from **USS Kearsarge (CVA ex-CV 33)** to

blast the enemy's well camouflaged "little Detroit" clear out of business.

What happened to Chung-jojur-ri is typical of the destiny of many enemy installations in World War II and the Korean fighting. In both those conflicts, field commanders estimated that 80 to 85 per cent of their intelligence information came from aerial photo reconnaissance missions like the one that broke through Chung-jojur-ri's disguise.

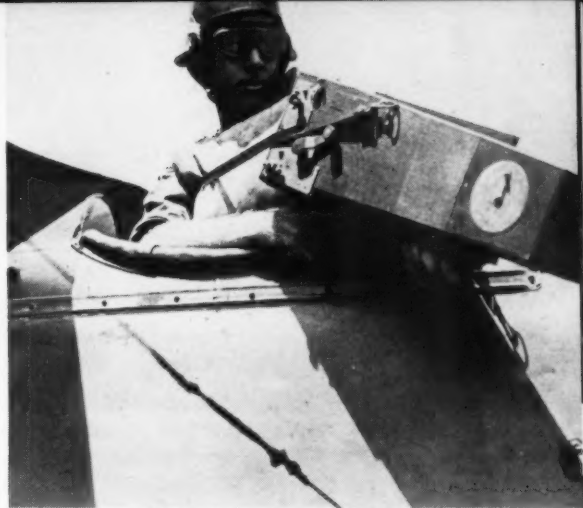
As those figures show, aerial photo-reconnaissance is a pretty important part of the modern Navy's combat operations. But, important as it is, it's only one of many ways in which the Navy uses what is probably its most versatile weapon—the camera.

Today, photography is used in nearly every activity of the Navy in wartime or peacetime—and under water, on the water, in the air or on the ground. Here are a few random examples:

- **Beneath the sea** the Hydrographic Office has taken pictures of the ocean bottom at depths of more than 20,000 feet to probe the secrets of Davy Jones' locker. Training films made under water are used to teach frogmen how to dispose of enemy mines and obstacles. A "fisheye" views of such subjects as torpedoes being fired, underwater explosions, hulls moving through the water or ships' screws turning are used in research projects to improve the navy's ships, weapons and machinery.

PHOTOGRAPHS IN ACTION — Armed with their ever trusty cameras, these PHs make an accurate and precise record of the gunnery exercise of a ship.





the Navy. FIRST aerial photo for Navy was taken by W. L. Richardson, MM2c, in 1914. Right: Richardson goes airborne in 1916.

FOR THE RECORD

Photo reconnaissance goes under-water too. In the Second World War, U. S. submarines undertook special missions in the Pacific between September 1943 and December 1944 to take periscope pictures of enemy-held shorelines. Periscope photos were also used to verify ship sinkings in actual combat or on maneuvers.

• **On the surface**, movies and still pictures can be taken in the midst of battle to keep the public informed of what the Navy is doing, to provide a valuable historical record of the Navy's operations and to allow post-battle study of combat techniques.

Photos of battle damage to ships and planes make it possible to devise new protective measures and better methods of repair. And, microfilms of original blueprints, flown to a shipyard ahead of a damaged ship's arrival can cut yard time by as much as 25 per cent. Replacement sections for a wounded ship can sometimes be built and ready to put in place while the ship is still thousands of miles from the yard, thanks to microfilmed blueprints and damage photos.

Another important use of photography on surface ships is in gunnery practice, where Fleet Camera Parties take pictures of shell splashes which are measured to provide an accurate record of just how well a ship does firing at air or surface targets.

And, radarscope photography,

which makes it possible to compare the presentation on radar with a picture of what the scope should show at a given position, has become a valuable aid to navigation in darkness or fog.

• **In the air**, photo-reconnaissance is only one of many ways in which the Navy puts the camera to work. Aerial photo-mapping is employed to check the accuracy of old charts, to map previously unexplored areas

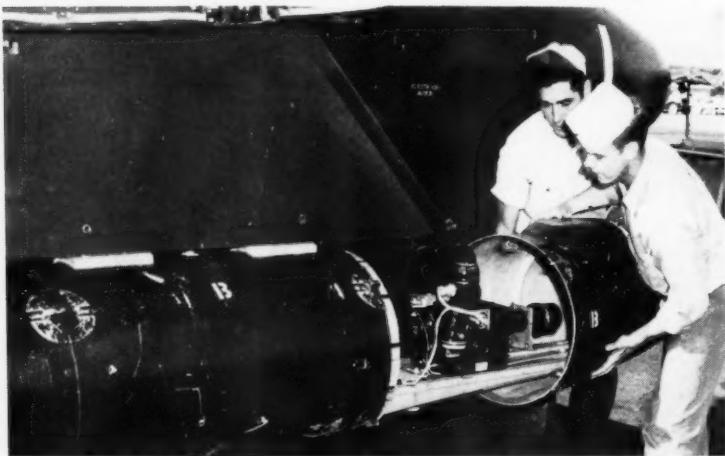
(the interior of Antarctica for instance) and to show ground commanders unfamiliar terrain. Photographs of aircraft accidents help investigating officers to establish the cause of crashes and to find ways to prevent them in the future. Fleet gunnery practice; formation flying technique; the effectiveness of camouflage; and the efficiency of smoke screens, Fleet formations and maneuvers are just a few of the

NAVY'S FIGHTING TEAM also includes a combat photographer who captured this exciting moment by getting into the thick of the battle.





ON THE PROWL — Jet photo team streaks over enemy country getting battle information. Below: Special pod camera for photographing missiles.



fields in which improvements can be made through the study of aerial photographs.

In tests of rockets and missiles the camera goes along to record the readings on the instruments they

carry, and cameras on the ground take pictures of launchings and flights to gather data needed for future experiments.

And, of course, there are gun cameras to show who did what to

whom in aerial combat or practice

• **On land**, the Navy uses photographs to record the progress of construction; to show what happens when equipment is subjected to punishing conditions in the testing laboratory; to indicate damage done by fire, flood, storm, erosion, corrosion or neglect; and to accomplish countless other tasks.

Naval Observatory time, accurate to within several thousandths of a second, is determined through data automatically gathered by a photographic zenith tube, and the camera has become almost as important as the telescope in astronomy.

In Navy hospitals, photography is used in diagnosing some diseases, train doctors in operating procedures and the recognition of symptoms and to provide a before-and-after record of bone and skin grafts. Microscopic samples are photographed, so the doctors can study them at their own convenience and more easily compare one sample with another.

All this is a far cry from the early days of Navy photography, for even though the science (or art) is now over 100 years old, it took men a long time to realize that the camera was much more than just a device for "taking pictures" instead of painting or drawing them. For instance, aerial photographs had been made from a balloon as early as 1860, but it wasn't until World War I that aerial photo-reconnaissance really began to come into its own.

One of the first "photographs following the battle" to be placed in the record files was by Matthew

WATER WORK — Cameraman goes below to realm of Davy Jones. Right: Special gear catches results of practice



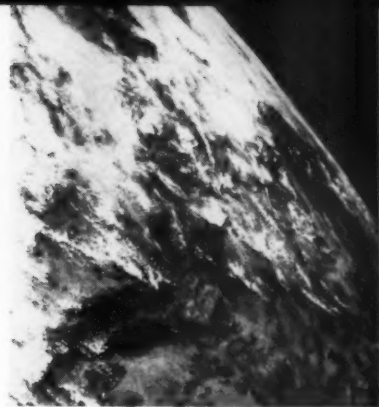
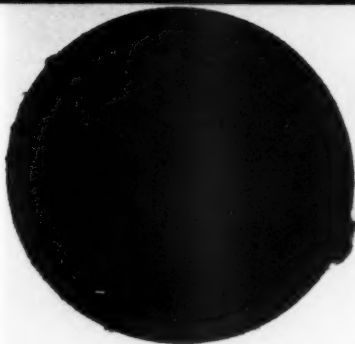
Brady, famed Civil War cameraman.

Brady took his historic shot on the Federal ironclad *Monitor* shortly after her momentous encounter with *Merrimac*. The print shows part of *Monitor's* crew standing about the deck. Some of the men are waving at the camera (even before television there were people like that) and others just look weary and slightly awed by the man with the box and black cloth. Brady didn't realize it at the time, but his picture presented an accurate record of the damage done to *Monitor* in the battle. At least five indentations in her turret attest the accuracy of the Confederates' guns and the strength of Yankee armorplate.

Between the Civil War and World War II, photography in the Navy was primarily pictorial — United States forces landing in Samoa in 1892, the first liberty party in Yokohama in 1907, the fighting at Vera Cruz, Mexico, in 1914, damaged ships in World War I and battlewagons on maneuvers in the 1920s and '30s.

The Navy's first major use of the camera for other than historical, public information or recruiting purposes, was by the Bureau of Ordnance in gunnery exercises. A special set of cameras, much like those carried by modern Fleet Camera Parties, was used aboard surface ships to record the splashes of shot in the target area. By triangulation—the same method used today—the exact location of the shells when they hit the water was computed from the pictures.

When the "aeroplane" joined the



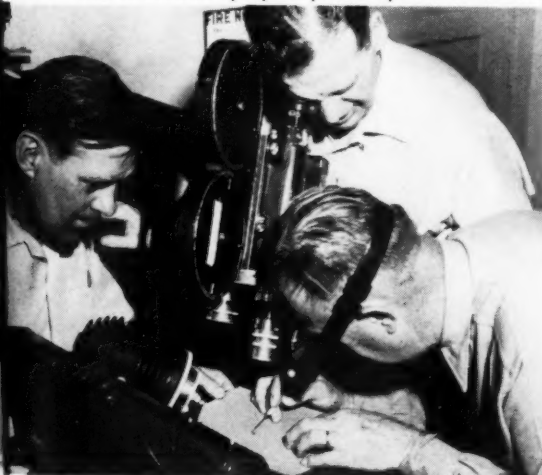
PHOTOS play an important part in developing tomorrow's Navy. Here cameras record (above) sun and earth, (below) projectile's path, ocean floor.



Navy back in 1911 another job was found for the camera; photos were used (in a somewhat haphazard way) to augment the records and show the results of structural failure in aircraft.

The first Navyman to be designated an official photographer was Walter L. "Uncle Dick" Richardson, a Ship's Cook, Third Class, who wandered into the field as a hobbyist. In the winter of 1915-16, while

NAVY PHOTOGRAPHY plays important part in medical research. Right: Fleet photographer stands by twin mount.





SHELL BURSTS are filmed by Camera Group during gunnery practice.

They Help the Navy to Fire Straight

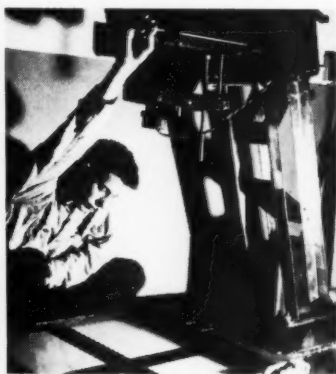
The mission of the Fleet Camera Group in the Pacific Fleet Training Command is to "photo-triangulate" surface and antiaircraft firing exer-

cises and furnish support with cameras in covering historical events.

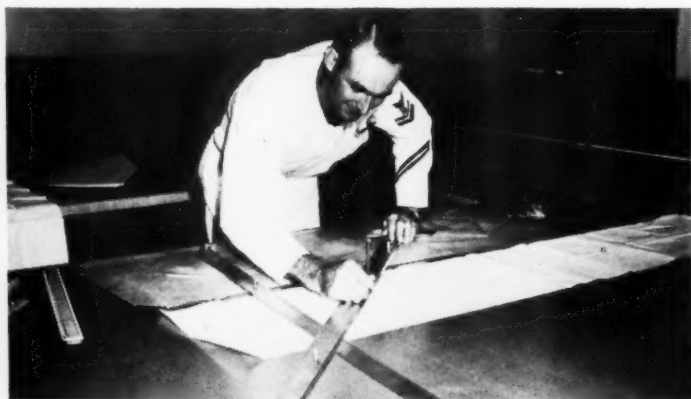
In the photo triangulation of gunnery exercises—which helps keep the Navy firing straight—the group shoots some two to three thousand photographs a month.

Every ship undergoing training with the Training Command receives the services of the Camera Group. Members of the group photograph each firing exercise of every ship, covering all phases of the shooting exercises. The recording on film of the location of each burst in relation to the target provides the ships with a "true picture" of the results.

The Group also functions as the photographic center for the Naval Station and makes from four to five thousand passes and identification cards each month.



BLOWUPS — Enlargements of firing photos are made by J. R. Berryman, PH2, giving record of practice.



SINISTER PLOT—J. R. Price, QM2, plots gunnery exercise. The plot will provide the firing ship with an accurate picture of the results.

stationed at Pensacola, Fla., he began snapping pictures of various activities connected with the operation of the Flight School. These proved so useful that Richardson was taken out of the galley and put into a broom closet—a broom closet which he made into a darkroom. However, he didn't spend all his time there. One day, with his cigar-box-style camera, he took to the air to make what is credited as being the first official Navy aerial photo.

A few months later Richardson was transferred to what later became the Bureau of Aeronautics to organize the Photographic Division and plan the establishment of a school for photographers. His plans were approved and he was commissioned and put in charge of that division.

The school Richardson had planned was established in the spring of 1918 at the Naval Air Station, Miami, Fla. All photographers available were ordered to it—along with anyone else who could pass the entrance exams. The course of instruction lasted six weeks, after which graduates were assigned to photo labs at various air stations in the United States and overseas.

With the World War I armistice, that school was closed, but the need for trained photographers soon became so acute that another one was opened in 1920 at Anacostia, D. C. (It was moved to NAS, Pensacola, Fla., in 1923 and is still there.)

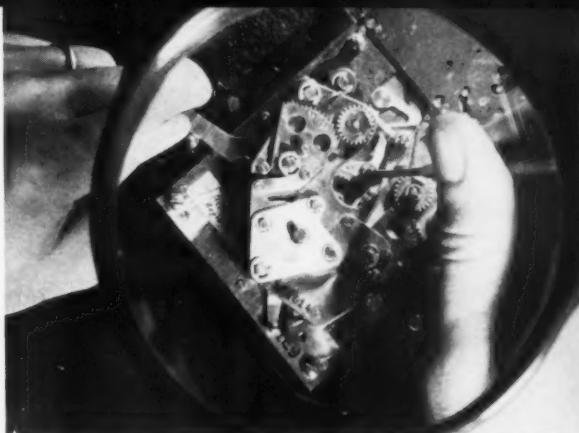
In 1921, with the establishment of the photographer rating, it was evident that photography was here to stay. However it wasn't until World War II that photography took on the importance it holds today.

From a pre-war figure of thousands of dollars, the wartime photography budget reached a peak in the millions. Combat cameramen covered the war from Pearl Harbor to the Japanese surrender on board USS *Missouri* (BB 63). Reconnaissance photos helped pave the way for invasions. ID photos were turned out by the mile. Movies and slides were used in all sorts of training. And, overseas mail was put on microfilm so that it could be delivered faster and carried in greater quantities. After V-J Day the cameras went on shooting, and the Navy went on improving its photographic gear and finding new uses for it.

That trend continued during the Korean war and it's still going on today.

—Jerry Wolff

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IT ALL GOES TOGETHER — EM cleans, and lubricates camera. Right: Repairman needs magnifier for small parts.

Eye Doctors for Navy's Cameras



THE NAVAL PHOTOGRAPHER'S MATE of today, more than ever before, is assured of equipment well maintained by specially trained photographic repairmen, who understand the problems of the man in the field. These men are trained at the Camera Repair Class C School of the Naval Air Technical Training Unit, Naval Air Station, Pensacola, Florida, and are assigned Navy Enlisted Classification Codes as camera repairmen.

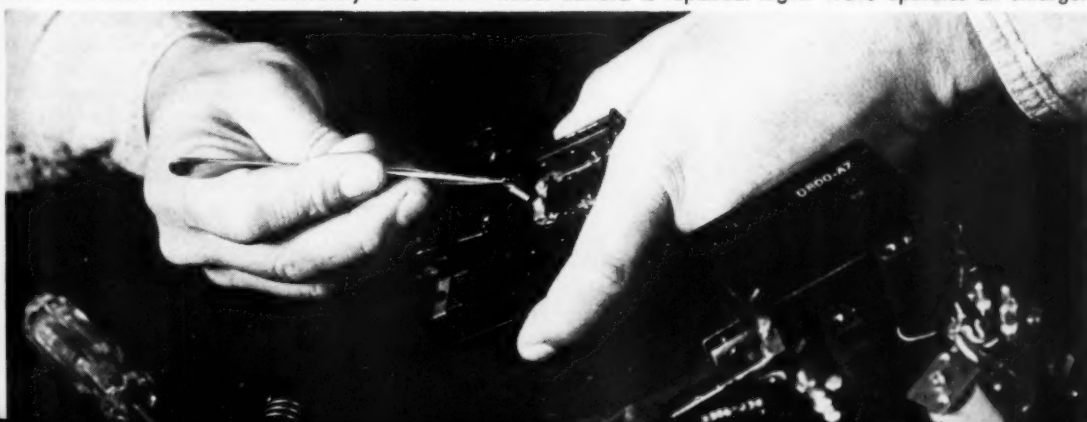
This 19-week course is designed for eligible photographer's mates, second class or above, with at least 18 months' obligated service.

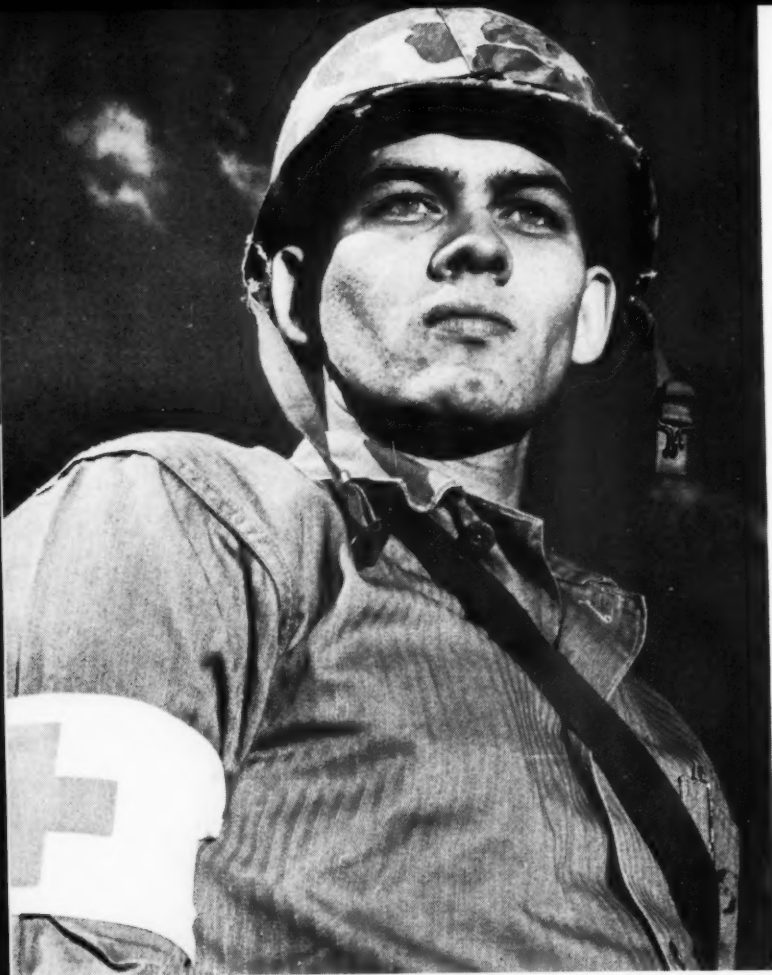
Graduate repairmen who are interested in the field of instruction as well as photographic repair are the instructors. They constantly strive to reach the highest perfection in the class, using well designed lectures, visual aids, cut-away working models, three-dimensional drawings, installation boards, and technical assignments. Many of the units worked upon by the Navyman and used in the class rooms are far more complicated than delicate watches.

—Delbert Cass, SN, USN.



NAVY CAMERA PARTS are accurately filed. Below: Radar camera is repaired. Right: Wave operates an enlarger.





THE YOUNG MAN clad in Marine "utilities" crawled slowly forward on his stomach while short bursts of a thirty caliber machinegun sent slugs whistling past his head and exploding charges of TNT threw dirt in his already mud- and sweat-streaked face.

The beginning of a fiction story? Not at all. The young man could be any Navy hospital corpsman going through training at one of the Field Medical Service Schools at Camp Lejeune, N. C., or Camp Pendleton, Calif.

Since the Marine Corps has no enlisted or officer medical personnel of its own, naval personnel fill the medical billets in the Corps. The men wear Marine Corps uniforms with Navy rating badges on their left arm.

After graduation from one of the Class "A" Basic Hospital Corps Schools at Great Lakes, Ill., San Diego, Calif. or Bainbridge, Md., (now disestablished), corpsmen take

over their assignments in hospitals, at large shore stations or in ships. About 10 per cent of the corpsmen in the Navy are on duty with the Marines in peacetime.

Hospital Corps personnel are made available to the Atlantic and Pacific Fleet Service Force commands who are responsible for the assignment of personnel to the Commanding Generals, Fleet Marine Force, Atlantic and Pacific.

Once assigned to the Fleet Marine Force, corpsmen go to the Field Medical Service School at either Camp Lejeune or Camp Pendleton. These schools are quite unlike any you have ever heard of—no one flunks. Don't think for a minute that no one flunks because the course is easy. It is not easy for one simple reason—it can't be. In fact, it's rugged. At these schools corpsmen learn how to stay alive under battle conditions, and how to live like a Marine.

Since corpsmen go where Marines

Hospital Corps

go in combat, each step of the training at any of these schools is highly important.

When you check over the facts and figures of World War II, you find there were 1046 enlisted hospitalmen killed in combat. Of these, 563 were attached to Fleet Marine Force units. Of the 2843 corpsmen wounded in action, 2249 were with the Marines.

Seven Medals of Honor were awarded the Medical Department during WW II. All seven were to corpsmen and all of these were serving with the Marines at either Okinawa or Iwo Jima. For the most part, commendations accompanying these medals were: "... realizing that his own wounds were fatal, he staunchly refused medical attention for himself and, gathering his fast-waning strength with calm determination, coolly and expertly directed his men in the treatment of two wounded Marines..."

It goes right on down the line in medals awarded to corpsmen; Navy Cross, 51 to corpsmen with the Marines out of 67 awarded to hospital corpsmen and 388 Silver Stars to corpsmen with the Marines out of 464 awarded to corpsmen. During the Korean conflict, five of the seven Navymen awarded the Medal of Honor were combat hospital corpsmen. Of the five, four were posthumous awards. Here is the citation accompanying the Medal of Honor which was presented to one of the five—William R. Charette, HM3, USN.

"For conspicuous gallantry and intrepidity at the risk of his life above and beyond the call of duty as a Medical Corpsman, serving with a Marine Rifle Company, in action against enemy aggressor forces in Korea during the early morning hours of 27 Mar 1953. Participating in a fierce encounter with a cleverly concealed and well entrenched enemy force occupying positions on a vital and bitterly contested outpost far in advance of the main line of resistance, Charette repeatedly and unhesitatingly moved about through a murderous barrage of hostile small arms and mortar fire to render assistance to his wounded comrades.

"When an enemy grenade landed within a few feet of a Marine he was

attending himself absorbed in death. Although wounded in the hip, he ripped the kit from his source of bandages, clothing, administered wounds to those well.

"Obtaining combat been taken from a removal placed although jeopardized side of suffering serious upright posed enemy effectively alleviated remove.

"By inspiring wounded directly lives. reflects the and end of the

The courage play in ing em and ev is one c sions of save th might men le alive so the liv training Service

During school, viewing 62 subj Reading to Asia tsugamu

Corpsmen on Field of Combat

attending, he immediately threw himself upon the stricken man and absorbed the entire concussion of the deadly missile with his own body. Although sustaining painful facial wounds, and undergoing shock from the intensity of the blast which ripped the helmet and medical aid kit from his person, Charette resourcefully improvised emergency bandages by tearing off part of his clothing, and gallantly continued to administer medical aid to the wounded in his own unit and to those in adjacent platoon areas as well.

"Observing a seriously wounded comrade whose armored vest had been torn from his body by the blast from an exploding shell, he selflessly removed his own battle vest and placed it upon the helpless man although fully aware of the added jeopardy to himself. Moving to the side of another casualty who was suffering excruciating pain from a serious leg wound, Charette stood upright in the trench line and exposed himself to a deadly hail of enemy fire in order to lend more effective aid to the victim and to alleviate his anguish while being removed to a position of safety.

"By his indomitable courage and inspiring efforts in behalf of his wounded comrades, Charette was directly responsible for saving many lives. His great personal valor reflects the highest credit upon himself and enhances the finest traditions of the United States Naval Service."

The citation is indicative of the courageous role hospital corpsmen play in battle. Their heroism in giving emergency treatment under fire and evacuating casualties to safety is one of the great humanitarian missions of combat. Their efforts helped save the lives of many men who might otherwise have died. Corpsmen learn how to keep themselves alive so that they, in turn, can save the lives of others. They get this training at one of the Field Medical Service Schools.

During the four weeks at either school, close to 11 hours are spent viewing training films. These cover 62 subjects ranging from Basic Map Reading and Effects of Atomic Blast to Asiatic Schistosomiasis and Tsutsugamushi Prevention. Some of the

in-betweens include Evacuation of Casualties at Saipan, Transportation of Casualties, Medical Aid Men in Action, The First Aid Prevention of Shock, and Use of Whole Blood, Plasma, and Serum Albumin. There are many other hours to be filled.

The first hour of the first day at school introduces the corpsman to the aspects of Marine life. This takes in the subject of Traditions of the Marine Corps.

Some of the highlights of the course include: medical support in amphibious operations, lectures on land mines and booby traps, and demonstration and application of casualty carries. The students perform corpsmen duties during a simulated assault on a fortified position, in which Marines use half-pound blocks of TNT, 3.5 rocket launchers, flame throwers, hand smoke grenades

and rifle grenades.

But training doesn't end there. They find out for themselves what it's like to pitch a tent and take part in a night problem. There are amphibious principles, too, with debarkation, care and use of lifejackets and the inevitable climbing up and down landing nets on a mockup APA. Corpsmen get a taste of tank life and go to the range where they take part in demonstrations showing the capabilities and limitations of a tank, participate in a tank-infantry coordinated attack, tank casualty evacuation, tank assistance, casualty recovery, treatment and evacuation.

They won't be qualified radiomen when the course is finished, but they will know how to use a radio and field phone communications. They will find out what it's like to be flown in helicopters to forward areas,

AMONG FRIENDS AGAIN—Corpsmen bring wounded Marine behind lines in Korea. In a few minutes, helicopter will have flown him to protected rear area.





NAVY HOSPITAL CORPSMEN go in with first wave. Rt: Combination of copter and corpsmen makes life-saving team.

have combat indoctrination for mental conditioning by creeping and crawling through barbed wire, over logs and obstacles while actually under live machinegun fire and simulated incoming artillery fire. During this, all about the trainees are slugs from machineguns and exploding TNT. This is followed up by simulated first aid and mass casualty handling.

During the fourth week, there are lectures and demonstrations on embarkation and debarkation. The corpsmen draw 'C' rations, lifejackets and sleeping bags and participation in a battalion exercise using field gear and packs.

The field pack, which includes part of the items known as "782 gear," weighs about 60 pounds. Among the contents of 782 gear are a shelter half, two blankets, poncho, change of outer and inner clothing, extra boots, shaving gear, towel, haversack and knapsack; a day's ration, entrenching tool, helmet, belt with two canteens full of water and a first aid pouch. In addition to this, the corpsman also carries the Unit 1 Medical Aid Kit which weighs in at about 10 pounds and contains band-

ages, morphine, tourniquet, safety pins—even down to a thermometer which, as one HM who has served with Marines said, "I've never yet seen a corpsman use one in combat."

Another part of the training includes the setting up of a bivouac area and establishing security watches, embarking in DUKWs with field gear, rations and lifejackets for an amphibious landing. During the landing, HMs learn something about setting up battalion aid collection and clearing stations under fire, and how an infantry assault is supported. During this phase of training there are a simulated atomic burst, mass casualty handling, decontamination and evacuation followed by a critique on the landing. Then they set up camp installations and DIG IN.

Briefings are held on area and personnel security followed by the application and demonstration of hand grenades. During a night problem, corpsmen accompany a combat patrol and pick up pointers on administering company and battalion aid in support.

The Wednesday before graduation day there is another amphibious landing followed by an introduction

and application of the self defense art of judo and another night problem with infiltration and a surprise attack. During a blackout corpsmen help support an infantry attack which is sustaining heavy casualties.

On Thursday, the bivouac area is policed. This includes the removal of all trip wires and filling in all fox holes and bunkers. After striking camp, they are required to return from bivouac to the barracks in small groups using a compass and maps to find six secluded check points en route.

Graduation day! They start off by cleaning and turning in the 782 gear. This is followed by a personnel inspection and a parade. Then, what the corpsman has been waiting for—graduation and liberty.

It is only after four weeks of instruction at one of these schools that corpsmen are assigned to a particular Fleet Marine Force unit. At that time they will be attached to and live with one specific company.

After assignment to a company, a corpsman's typical day will start with reveille at 0630 followed by a half-hour of calisthenics, then breakfast. Between 0900-1000 he holds sick

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RIGHT IN THE MIDDLE—Arrow points out corpsman in now famous Iwo Jima flag raising. Rt: First aid on battlefield.





FIELD EXERCISES give corpsmen experience in bandaging superficial wounds or assisting in the operating room.

call at battalion headquarters then works at the aid station until noon. At 1300 he falls out with the unit, taking part in drills and maneuvers. His liberty starts around 1630.

There is no special way for a corpsman to get duty with the Marines. But if you know of a corpsman who wants this duty, you can pass this information along. If he is already at sea, he could submit a request to the Fleet Commander via his commanding officer. And if an opening comes up he'd have a pretty good chance of getting it. If ashore, and eligible for sea duty but not on limited duty, he should indicate FMF duty on the Shorever card.

Hospital corpsmen have been taking care of wounded Marines since 9 Feb 1799. It was on that date that the first loblolly boy (as hospital corpsmen were known then), John Wall, helped take care of American wounded while serving in *uss Constellation* when that ship soundly whipped the French frigate *L'Insurgente* in a West Indies battle off the island of Nevis.

Corpsmen accompanied Marines during the expedition to Panama in

1885. They went ashore with the Marines in 1898 at Guantanamo, and later, in 1914, at Vera Cruz. A year later they went ashore with the Marines at Bizoton, near Port au Prince, Haiti. In 1927 they were with the 5th and 6th Marine Regiments in Nicaragua. Their role in World War II and Korea is well known.

The corpsman learns fast the importance of his training and how to use his equipment. He also learns that at times it becomes necessary to improvise. One example of improvisation brought to the fore was the Gallegher Stretcher. It was named after its inventor, Chief Pharmacist's Mate John A. Gallegher, USNR, who was attached to the Marine's Sixth Division during the fighting in the rugged hills of northwestern Okinawa peninsula. It was called into play to carry wounded Marines over the tortuous hillside trails and down cliff-like embankments. Gallegher first saw the need for a carrier of its type during the Tulagi operation when corpsmen were unable to use rigid stretchers over cliff-studded terrain and were forced to use ponchos.

The Gallegher Stretcher weighed four pounds, six ounces, and was transported in a small pack attached to the cartridge belt. If rigidity was preferred, poles were inserted into its lengthwise seams. Three overlapping straps secured the patient in the lying position, while two other straps could be fastened around the thighs, similar to the way a parachute harness is applied, if the wounded man was to be lowered by line over an embankment. This stretcher could be carried by from one to six men, used rigid or otherwise and could be lowered by rope with the patient fully secure.

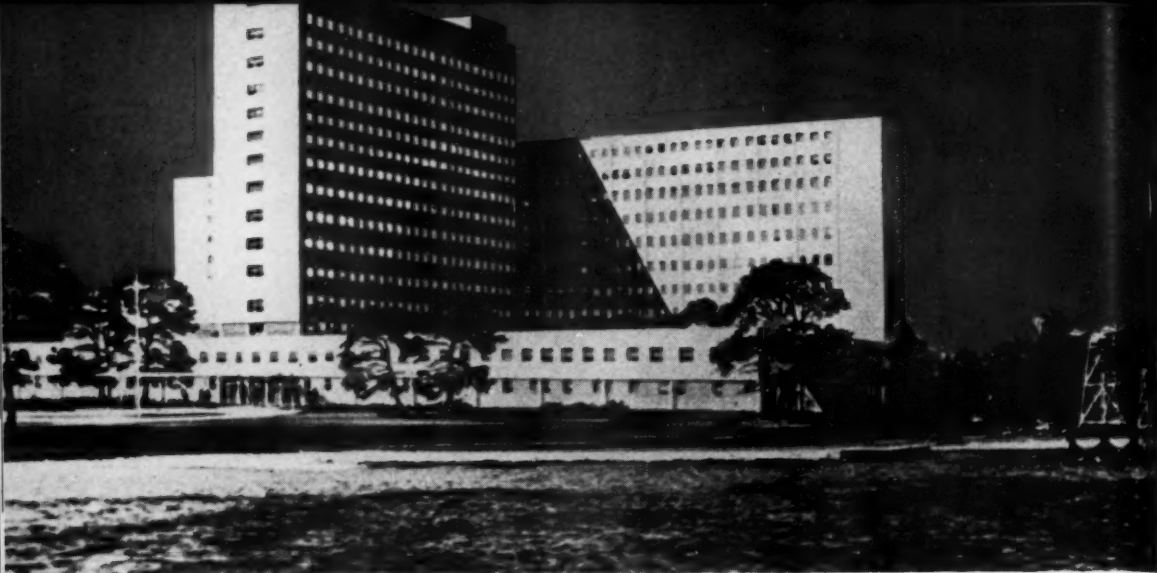
Wherever Marines are fighting, have fought or will fight, Navy hospital corpsmen too, have been or will be right there with them.

And the next time you run across the now famous photograph showing the flag raising on Mt. Surabachi, remember that there was a Navy hospital corpsman with the Marines at that time, too. The second man on the right in that picture is John H. Bradley, Pharmacist's Mate, second class, USNR.

—Thomas Wholey, JOC, USN.

INITIAL TREATMENT and first pint of blood give wounded strength to get to rear area hospital, or Rt: to hospital ship.





MEDICAL PREVIEW—New medical center is being built at Portsmouth on the grounds of Navy's oldest medical unit.

NAVY HOSPITAL

AN ULTRA MODERN hospital which will feature the best in patient treatment facilities, is being constructed on the grounds of the Navy's oldest medical unit, the U. S. Naval Hospital, Portsmouth, Va. The new structure, which will occupy a place in the Portsmouth skyline 16 stories high, will be surrounded by the 90 existing buildings of the hospital command which has served the Navy's sick and wounded for 127 years.

The modern design of the new structure will be in striking contrast to the Doric columns surrounding

SEA TO SHORE—New hospital at Portsmouth will have beds to care for 800 patients and if need arises can be expanded to take care of more.



the entrance to the present three-story main hospital building. These columns date to the original medical building opened during the administration of President Andrew Jackson.

It has been recorded that only one patient was admitted on the day the hospital opened in 1830. Today, it is not unusual to find as many as 100 patients entering the hospital in a 24-hour period.

Midway in the first year of the hospital's existence there were 36 patients. Today this same medical unit, expanded many times over, has an average patient population of 1300 military personnel and dependents, provides outpatient treatment for 7000 dependents each month and is the birthplace of 6000 babies every year. This demand coupled with the deterioration of the World War I and II temporary buildings now being used to complement the facilities of the main building, explains the need for the new structure.

The cost of the project will be nearly \$16 million when the building is completed around Christmas of 1959. Site work for the structure started in 1955.

The plans, consisting of some 214 sheets, call for a capacity of 800 beds with a "chassis" designed to service 1500. In other words, the building now under construction will have room for 800 beds in

wards and two-patient quiet rooms, but all of the services such as the surgical suite, X-ray suite, laboratories and other medical services, will be equipped to handle 1500 bed patients. The additional bed space would be obtained by adding another wing at some future date or continued use of certain temporary buildings.

The new structure will have a two-story rectangular base, 440 feet long and nearly 260 feet deep. On top of this base will rise a "T"-shaped structure which will reach a height of about 225 feet. The top of the "T" will run the length of the base at the back of the building and will be 11 stories high. The leg or vertical member will divide the base and reach the full 16-story height topped by an elevator penthouse. The 11-story portion will be 25 feet thick, while the leg of the "T" will have a width of 47 feet.

The building's foundation at one time had the appearance of a field of 12-inch steel pipes growing out of the ground. Into these tapered tubes, driven 40 feet into the ground, was poured concrete to give the building 2652 legs on which to stand. On top of this, workers fabricated a framework of steel reinforcing rods which was filled with concrete 50 inches thick to provide the ground level pad for the 16 story building.

Work on the superstructure began

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in late summer of 1957. The 4900-ton structural steel frame will be encased in concrete. On top of the concrete will be placed a light gray colored brick coating divided into fields by concrete strips. The first and third floor concrete walls will be covered in part with porcelain finished metallic plates.

The pure "T" design of the superstructure will be disrupted by a series of staggered floors extending out of the left side of the leg above the two story base. They will rise in pyramid fashion to the fifth floor.

To visualize what the hospital will mean to a Navy patient, you must project yourself to 1960 when the interior will be completed and the building placed in service. A patient admitted to the hospital in that year will find it a model of efficient design. The layout of ward and treatment areas will minimize movement from one area to another and will reduce traffic in the building.

You will enter the building, which is surrounded by trees and overlooks the Elizabeth River, through either the main entrance at the base of the leg of the "T" or through an enclosed courtyard in the right side of the rectangular base, or be moved directly into the receiving and emergency units at the rear of the first floor. If your condition requires it, you will receive treatment in the emergency operating rooms on the first floor and be confined to bed in the receiving unit.

Your dependents will receive treat-



ONLY THE BEST—The modernistic medical building of gray brick and aluminum colored metallic plates will be ready to receive patients early in 1960.

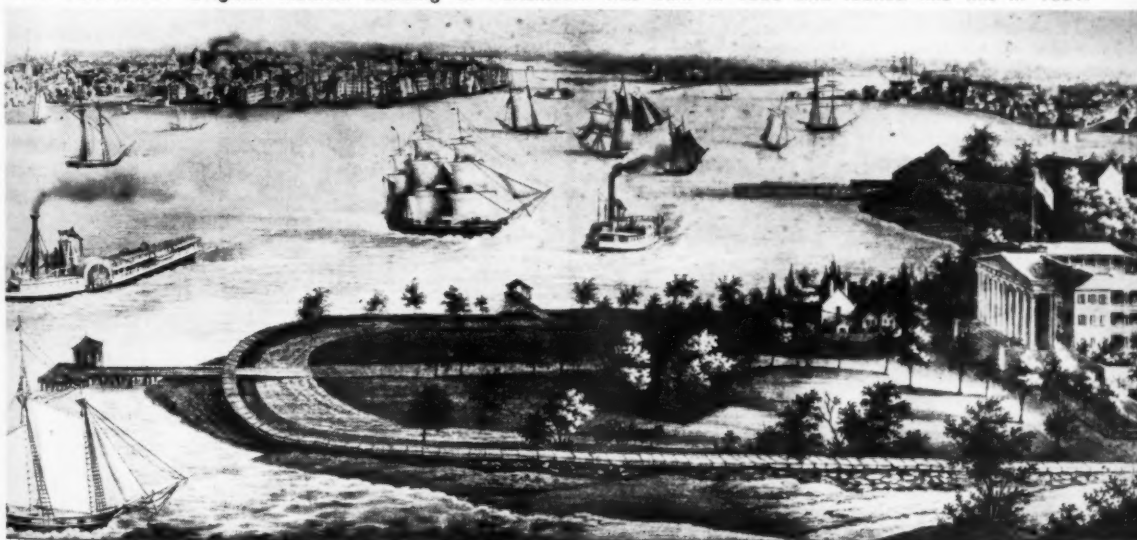
ment on the first floor in the outpatient clinic while studies of heart and respiratory ailments will be made in the cardiopulmonary functional laboratory also located on the ground floor. The administrative offices on the first floor and also on the second, would handle the paper work necessary.

On the second floor you will be able to deposit money in the bank, buy a stamp at the Post Office or cigarettes at the Navy Exchange. Your uniforms will be cleaned at the tailor shop and new heels put on your shoes by the cobbler. If not

confined to bed, you will pass the time in the game room or TV lounge or draw a novel from the library while the doctor does research on your case in the medical library. You might elect to attend a show in the second floor auditorium (458 seats) or spend some time in the 100-seat chapel.

Also located on the second floor is the master galley, one of the most modern features of the hospital. From the galley, food will move out to the adjoining mess hall, or will be assembled into complete meals and dispatched in special thermos

SAME LOCATION—Original medical building at Portsmouth was built in 1830 and looked like this in 1851.





FAMILY AFFAIR—New medical center will have the latest equipment and facilities for the Navyman's dependents in the modern T-shaped building.

containers to wards and quiet rooms. The containers will insure that the meal arrives piping hot. Special foods will be prepared in the diet kitchen next to the galley.

As a patient, you may be assigned to one of the beds in the 18 wards which begin on the third floor of the 11-story wing and extend to the top. Two 29-bed wards are on each floor, divided by a service core running up the center to the top of the "T." This core contains the nurses station, doctors' offices, examination and treatment rooms, visitors lounge and other ward support units.

The ward nurse will be able to keep each ward patient in view through a large glass window in her office. In certain patient areas such as the two-bed quiet rooms—the nurse will be able to converse with the patient over an intercom system. This hospital is one of the first Navy units to have an audio-visual nurse call system. Day rooms at the end of each ward and TV lounges will make your hospital stay

as pleasant as can be expected.

As a patient you would generally be assigned to the floor which also contains the clinics related to your treatment. In the event additional examinations or treatments are necessary you will travel from one floor to another via the eight elevators installed directly in front of the utility core in the leg of the "T." Seven of the automatically controlled, self-operated cars, will run to the 15th floor while the remaining unit will go to the top.

The elevator stop on the third floor admits you to the surgery unit which has eight operating rooms. Two of these are equipped for future installation of closed circuit television for use in studying operations or techniques. The two rooms will also have small viewing galleries for direct observation of the operation. All the associated surgery areas such as cleanup rooms, tissue and bone banks as well as offices, will be located on the third floor. So will the 17-bed recovery ward.

X-rays will be made on the fourth floor where orthopedic treatments will be given and the fifth floor will contain laboratories. The dental clinic will occupy quarters on the sixth along with the ear, nose and throat treatment area. The physiotherapy section will be on seven and the eye clinic on the eighth floor.

Quarters for officer patients will occupy the remaining ninth thru 15th floors of the leg. The majority of the 136 two-bed quiet rooms will be located there. However, six of the quiet rooms will be located in the service core on each of the nine ward floors.

A public address unit incorporated into the radio distribution system will carry messages throughout the

hospital while doctors will be alerted to calls over a visual nurse-doctor page circuit. All of the TV lounges, day rooms, and solariums will be serviced by a central antenna system. The radio system will provide you with a pillow phone at your bed which will allow selection of musical entertainment from local radio channels or from the hospital's own program of recordings. Speakers in certain areas will also provide similar entertainment.

In this structure the Bureau of Medicine and Surgery will place nearly \$1 million worth of new supplies and equipment. In addition, medical equipment from other buildings in the compound will be moved into the treatment areas of the building along with galley appliances and service units.

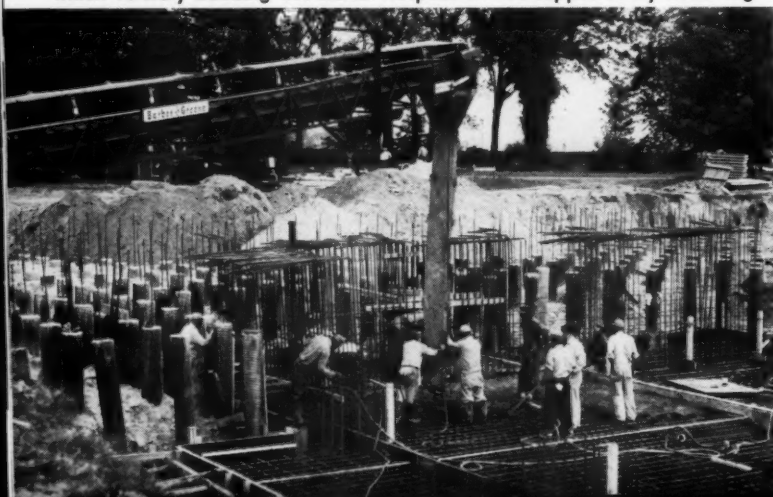
If the needs of the service ever outgrow the hospital, an additional wing can be added to the building. Provisions have been made for connecting an 11-floor structure to the back of the building. The corridor wing would join a second ward unit of equal height about 100 feet from the main building.

The new Portsmouth unit will be a valuable addition to the Navy's medical system which includes 23 hospital commands in the U.S., three outside the continental limits and the hospital ship *USS Haven* (AH 12). The medical commands are located at Chelsea, Mass.; Newport, R. I.; Portsmouth, N. H.; St. Albans, N. Y.; Philadelphia, Pa.; Bethesda, Md.; Annapolis, Md.; Bainbridge, Md.; Camp Lejeune, N. C.; Portsmouth, Va.; Quantico, Va.; Beaufort, S. C.; Charleston, S. C.; Jacksonville, Fla.; Key West, Fla.; Pensacola, Fla.; Memphis, Tenn.; Corpus Christi, Texas; Great Lakes, Ill.; Camp Pendleton, Calif.; San Diego, Calif.; Oakland, Calif.; Bremerton, Wash.; Guantanamo Bay, Cuba; Guam, M. I.; and Yokosuka, Japan. In addition, the Navy Medical Corps has detachments at various Army and Air Force hospitals.

The only other new hospital building being constructed by the Navy is at Great Lakes. It will be equal in size to the Portsmouth building and will be completed and placed in service in 1960. Both buildings will have important roles in the Navy's efforts to provide the best possible medical care for you.

—Bill Prosser, JOC, USN.

PIPE THIS — Concrete is poured into tubes in the foundation to form 'legs' on which 16-story building will stand. Hospital will be supported by 2652 'legs'.



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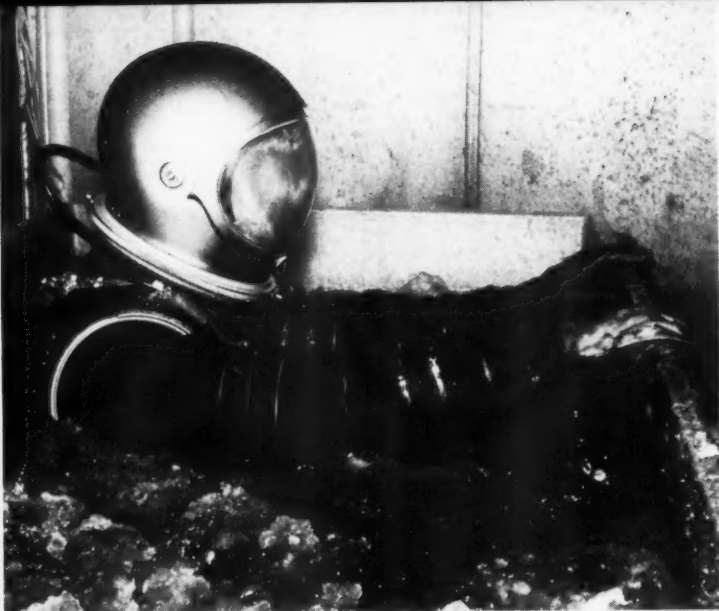
Navy Nurse

WORKING UNDER THE bright lights of the operating room and in the hospital wards, highly skilled nurses perform an important role on the Navy's professional medical teams.

These are the heroines on Navy ships and stations—the women of the Navy Nurse Corps. During nearly a half century, since 13 May 1908, these women have cared for the sick and wounded of two World Wars and the Korean conflict. Their duties have taken place at naval stations throughout the world, at sea on board hospital ships and transports and in the air on board military hospital planes. In addition they give care and treatment to military dependents. Here's a picture story of busy nurses.

Upper left: Nurse shows happy Navyman his new son. *Upper right:* Moments are tense before the operation. *Right:* Nurse directs patient care in orthopedic ward. *Lower right:* Dependent care is a part of the nurse's duties. *Lower left:* Trained hands of a nurse assist doctors during surgery in hospital operating room.





ICED MAN—R. J. McGowan, HMCA, USNR, tests Navy's space unit immersed in tank of freezing brine with air temperature at minus 40 degrees Fahrenheit.

PLANNING A TRIP to the moon in the near future? If so, you'll want to be sure to visit the Air Crew Equipment Laboratory, exclusive haberdashers to men with that forward look.

For nine years the Lab, which is located at Philadelphia's Navy Base, has been experimenting with space equipment. It has come up with the United States' first space suit, one which will enable a voyager to leave a rocket ship to explore the surface of the moon.

The space unit contains a sealed-

in atmosphere which could sustain a man in a vacuum for hours.

The project started with an emergency full pressure suit for use by pilots at altitudes above a 45,000-50,000 foot altitude. At these altitudes even pure oxygen would have to be forced into the lungs at such pressure that the pilot could not exhale against it.

As Navy researchers made new improvements on each version of the pressurized suit, they eventually developed one which would work outside of the earth's atmosphere and

at the same time would allow a spaceman freedom of movement.

The present suit provides a supply of pure oxygen at a pressure equivalent to that at 35,000 feet. This gives the man in the suit as much oxygen as he would get from breathing ordinary air at approximately sea level. The suit operates at this low pressure so that it will not be too bulky when used in space.

The space suit has undergone rigorous testing in the laboratory's four altitude chambers. In one test volunteer Richard J. McGowan, HMCA, USNR, put on the suit and entered a tank of brine which was at 28°F in a cold room where the temperature was -40°F. He remained in the tank for 54 minutes with no untoward effects.

To combat the heat and cold that might be encountered in space, the suit includes a ventilation garment which is essentially a suit of long-johns with tubes for circulation of ventilating air over the body.

In an altitude test of the suit, McGowan entered a chamber which was depressurized to simulate an altitude of 80,000 feet. After eight hours had passed, the observers outside the chamber were getting tired so they asked McGowan if he wanted to continue the test.

"You boys can leave," McGowan said, "Just send in a mirror and I'll observe myself."

The observers stayed and the test

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FREE FALLING chutists test flight gear and clothing at Parachute Unit, El Centro, Calif. Stripes aid observation.



for Space Travel

continued for three more hours.

The space suit has had at least one unrehearsed test which saved the life of a Navy pilot. While wearing the suit on a routine experimental high altitude flight for Navy Squadron VX-3 out of NAS Atlantic City, N. J., the pilot experienced an engine flame out resulting in an almost immediate loss of cabin pressure at 54,000 feet. The suit automatically inflated and enabled the pilot to bring his aircraft down to a safe altitude.

There are serious problems to be solved before man's first space voyage is possible.

The most important of these is the construction of a protective rocket ship which would not burn up as it re-entered the earth's atmosphere.

Another problem that requires investigation is the extent of cosmic radiation from the sun outside the atmosphere and beyond the influence of the earth's magnetic field. Exposure to extreme amounts of cosmic radiation would have the same effect as being too close to the fallout of a nuclear explosion.

The psychological problems involved in traveling in the confinement of a space ship for long periods are at present being studied. Men have remained in submarines for over 30 days without ill effects. The Lab people believe, with proper selection, this problem can be overcome. They also think that man will be able to adjust to the weightlessness that will be encountered outside of the earth's gravitational field.

They are confident that the Navy pressure suit can be adapted for space use and for the extremes of temperature that exist in space. If it is used some day by an explorer on the moon, he would be able to carry a much larger supply of oxygen than he can on earth because the force of gravity on the moon is only about one-fifth as strong as the earth's. To combat the effects of the great acceleration necessary to propel a man into space, the man could wear an anti-G suit underneath.

If the voyager wanted to make an inspection of his rocket ship while in space, he could leave the craft through a pressure lock while wearing his space suit. Then he could propel himself around the ship with oxygen jets working off the suit's

supply. The space man would not fall far behind the speeding ship because there would be no atmosphere to slow him down.

To prolong the time that it is possible for a man to stay in the space suit, Navy researchers hope eventually to develop means for feeding and discharging body wastes. With these improvements a man could live in the suit for days.

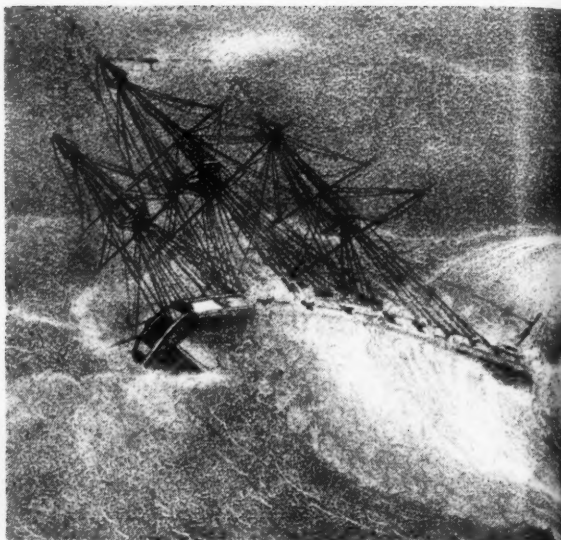
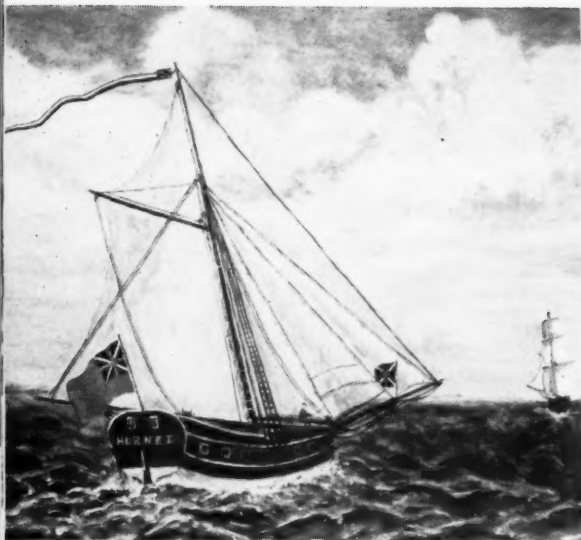
As the era of space travel approaches, the Air Crew Equipment Laboratory is continuing its efforts toward solving the problems that man will meet when he leaves the earth. Since there will be no source of water during a long space voyage, they have been working on various methods of reclaiming water that must not be wasted in the space craft. They also have been experimenting with chemical methods of absorbing exhaled carbon dioxide.

The confidence of the researchers in their space suit and in the future of space travel is reflected in Dick McGowan's hope that when the suit is first used outside of the earth's atmosphere—he will be wearing it.

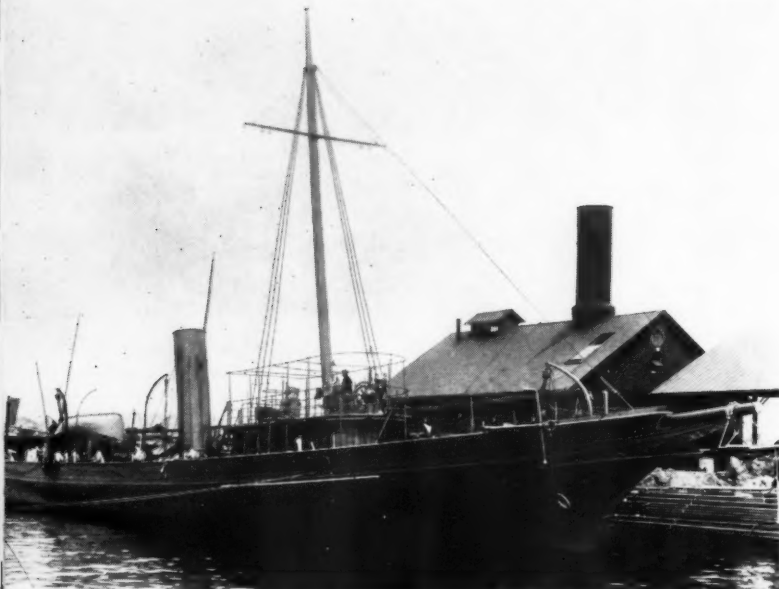
The present pressure suits are being test flown at the Naval Air Test Center, Patuxent River, Md.; VX-3 NAS Atlantic City, N. J.; and VFAW-3, NAS Moffett Field, Calif.

SUITS NAVY—Out-of-this-world uniform contains sealed-in atmosphere for space travel. Below: Floating qualities of the space suit are demonstrated.





SLOOPS—Hornet No. 1, left, saw action during the Revolution. No. 2 was engaged in the Tripolitan War.



SEVENTH Hornet (CV 8) was lost in Battle of Santa Cruz. Above: No. 6, Spanish American War veteran.



A Nest

HORNETS HAVE BEEN BUZZING around our enemies' ears ever since 1775. In all, eight ships of every description, from sloops to the latest carriers have borne the name.

The first of the *Hornets* was a small 10-gun sloop commissioned in Baltimore in 1775. After several engagements in the War for Independence, she was overpowered by a British blockade below Philadelphia and her skipper, CAPT John Nicholson, scuttled his ship so that it wouldn't fall into the hands of the enemy.

The second *Hornet*, also a 10-gun sloop, participated in the attack on the Port of Derna on the Libyan coast during the Tripolitan War. Together with two other men-o'-war, she helped silence the Turkish shore

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No. 3 HORNET vs PEACOCK Rt: Hornet after conversion.



War.

est Hornets

batteries enabling General Eaton's land forces to capture the city, which later proved to be the deciding action of the war. Hornet No. 2 was sold in 1806.

While her predecessor was engaged in the Mediterranean, the third *Hornet* was being built in the birthplace of the first of the hive, Baltimore. She was a 20-gun brig modeled after French warships. At one point during the War of 1812, *Hornet* No. 3 sailed in company with the famous *Constitution* on a cruise in South American waters. During this cruise, but after leaving *Constitution*, she captured several prizes, the greatest of which was the brig *Resolution* with \$25,000 in specie

aboard. Later, while on the same voyage, she encountered another British brig, *Peacock*. The two ships exchanged broadsides for more than two hours leaving the British ship foundering. The skipper of *Hornet* sent some of his men aboard *Peacock* in a vain attempt to keep her afloat. She sank carrying with her nine of her own crew and three crewmen of *Hornet*. Before the end of the war, *Hornet* was in several more engagements. Following the war, she saw action against African slavers and Cuban pirates between the years 1815 and 1829. She took her last cruise in 1829. In that year, she was driven from her moorings during a storm and when all was clear

was never heard from again.

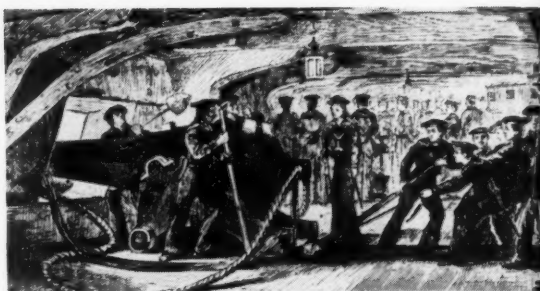
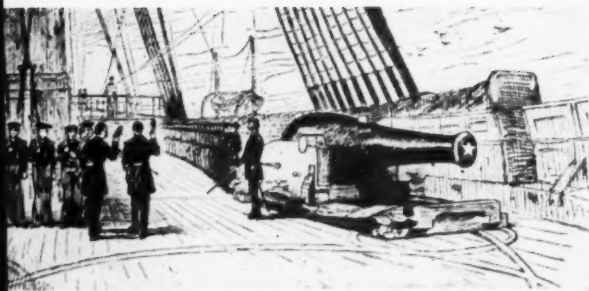
The career of *Hornet* No. 4 was perhaps the least colorful of the lot. She was a small five-gun schooner built for a mere \$2200, and was used primarily for inshore patrol work and as a dispatch vessel.

The fifth *Hornet* was rather special in two ways. An iron side-wheeler, she was the first *Hornet* to be steam-propelled and she was captured from the Confederates in 1864. Together with *Rhode Island* she received the surrender of the Confederate ram *Stonewall*.

The sixth ship to be named *Hornet* was a converted yacht. Although she was armed with only three six-pounders, two one-pounders and

DEFENSIVE batteries of today's carriers have little in common with offensive weapons of Civil War period.





INSPECTIONS AND General Quarters evolutions have not changed much from iron men and wooden ships days.

four machine guns, she distinguished herself during the Spanish-American War. In company with two other converted yachts, she encountered a Spanish squadron of nine ships including one cruiser, four gunboats, one torpedo boat and three smaller vessels. In a matter of three and a half hours, *Hornet* and Co. managed to sink or disable the whole squadron. In this action, *Hornet* fired almost 700 rounds and suffered no casualties.

Probably the best remembered of the *Hornets* was the first aircraft carrier (CV 8) to bear the name. Her squadrons left a trail of destruction in the early stages of WW II but her most memorable moment took place when she served as the springboard for LTGEN (then BRIGEN) Jimmy Doolittle's famous raid on the Japanese mainland in 1942. In October of that year, *Hornet* carried on a tradition of her forebears. No *Hornet* had ever been sunk or captured by an enemy. Badly damaged after being under attack for 10 hours in the Battle of Santa Cruz, *Hornet* No. 7 was torpedoed by our own destroyers to prevent her from falling into enemy hands.

Not a year elapsed before another *Hornet* (CV, later CVA 12)

appeared on the ships' register.

When her keel was laid, she was to have been named *uss Kearsarge* but when the news of *Hornet* No. 7 was received, it was decided to give her the famous old name so that there would again be a *Hornet* in the Navy.

A curtailed shakedown cruise was necessary to rush the ship into service with the Pacific Fleet. A two weeks' cruise to Bermuda, and back, enabled her crew to conduct exercises in gunnery, fueling, various calibration tests, test firing of her numerous batteries in addition to flight operations.

Early in her career, a few months after she joined the Pacific Fleet, *Hornet* had the chance to avenge the sinking of her immediate predecessor. Late in the afternoon of 20 Jun 1944, in the vicinity of the Marianas, the Japanese Fleet was engaged by the Task Force of which *Hornet* was a part.

It was during this fighting, later to be known as the First Battle of the Philippine Sea, that *Hornet's* squadrons bagged one of the enemy's largest carriers and scored torpedo and bomb hits on a cruiser and a carrier. Although many planes were damaged, all but one bomber crew were recovered or rescued.

Later that summer, *Hornet* made what was believed to have been the closest approach by a surface ship to the Japanese mainland up to that point in the war, when she sent search planes to within 175 miles of Honshu and cruised within 400 miles of the same coast.

CV 12 and her squadrons figured in almost every major campaign in the Pacific Theater. *Hornet* built up a proud record in planes destroyed, both in the air and on the ground, in naval and cargo ships sunk, in softening up such targets as Truk, Eniwetok, Iwo Jima, Luzon, and Okinawa and in assisting in the invasions of Leyte, Iwo Jima and Okinawa.

During "Operation Magic Carpet" after the war, *Hornet* was used as a troop transport to bring veterans back to the West Coast.

She was decommissioned in 1948 only to be recalled in 1953. After more than three years of operations in the Pacific, *Hornet* entered Puget Sound Naval Shipyard for a seven months' streamlining period which fitted her out with an angled flight deck, hurricane bow, deck edge elevator, and other improvements. She returned to the Fleet in August '56, modernized and ready to carry on a proud name. — Robert S. Man.

JET READIED for catapult take-off. Rt: *Hornet*men handle delicate job of loading ammunition with speed.





Snow Job

THE MASTER TRAINMAN Casey Jones would be snowed under by the problems confronting Navy's train in Antarctica. Unlike Casey these bluejacket "trainmen" have no shiny rails to guide them nor smooth road for their vehicles. With snow and winds blinding their vision they must make their way over 640 miles of ice and snow pocketed with hidden crevasses. They are hauling important supplies from Marie Byrd Land to Little America in connection with Operation Deep Freeze III. Their train is made up of special snow tractors and sleds designed to make the best of the difficult travel conditions.

Top: Snow train moves out across barren snow fields. *Right:* Weird looking gear mounted on tractor detects crevasses and blazes trail ahead of tractor train. *Lower right:* Navyman and tractors assemble for the 640-mile trek across the frozen waste. *Lower left:* Navyman re-flags the trail during blinding snow storm.

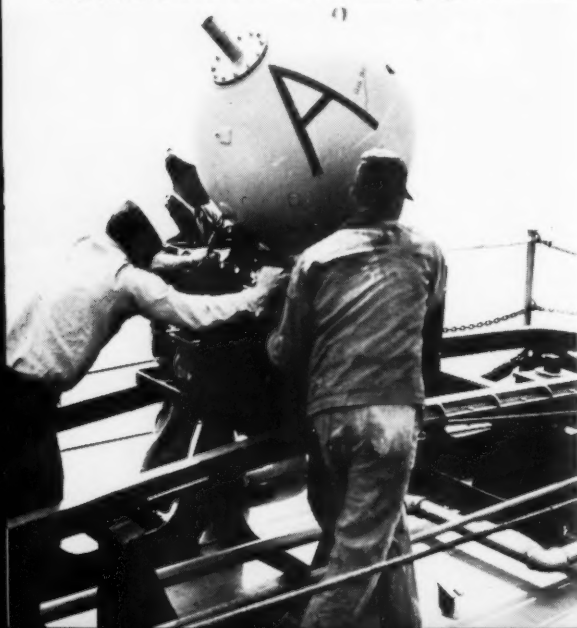




FINAL check is pulled to assure top-notch operation of mines. Below: Last-minute inspections are made.



LAUNCHING track on DM eases minelaying from fantail.



DELICATE touch of MN necessary before launching mine.

Iron Sea Monsters

IN TODAY'S NAVY of tomorrow, minelaying, an important function of naval power, is carried on by a group of men who have the nerves of a tight-rope walker, and the training and ingenuity of a scientist-inventor.

Many of these MNs, who are graduates of the Mine Warfare Schools at Yorktown, Va., find themselves on board mine-laying ships launching various types of mines.

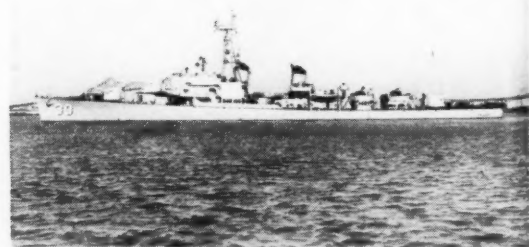
One of the important jobs in minelaying is the last-minute adjustment, such as activating certain mechanisms left in non-service condition and removing various safety devices. This job is performed almost with split-second timing. It demands great skill, and, above all, utmost accuracy.

When all is ready, the releasing gear is operated and the "sea monster" takes up its position in the water, there to wait silently until the enemy ship approaches.

Mines perform the job of keeping the enemy out of areas where he is not wanted. The mineman rarely sees the results of his work—and it's quite unlikely that he would hear about the results until well after the battle. But mines and minemen continue to be an important part of the "new look" in the Navy's nuclear-atomic Fleet.

The pictures on this page show the minemen of USS *Shea* (DM 30) in action while on training exercises.

POSING POSITION—USS *Shea* (DM 30) is trim minelayer.



ALL HANDS

Statutory

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Any qu is an imp again turn answer fo sonnel w Fleet Res duty upon 6 months not physio the retire disability. the Naval 6331, Titl be recall ance pay. be the sam completed of service

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FEBRUAR

LETTERS TO THE EDITOR

Statutory Limit on Claim

SIR: A Chief on board informs me that he never received survivor reimbursement for personal items lost at Pearl Harbor on 7 Dec 1941 while serving in USS *Oglala* (CM 4). Is he still eligible under Article A-5101 of the BuPers Manual? This article contains provisions for such reimbursement, but refers to various laws which we do not have copies of on board. It also says in effect that claims must be presented within two years after peace has been established.

If the Chief is still eligible, to whom should he submit his request, and what information should be included incident to such claim?

Another question concerns a man who retires on 19 and six and is later recalled before the completion of 30 years and fails to pass his physical qualifications to reenlist. Is he eligible for severance pay? To my knowledge this is strictly rumor, but several Chiefs have asked about it and I can't give them a straight answer. Can you help?—B.A.F., YN1(SS), USN.

• Time has run out for the Chief who lost his personal effects while serving in *Oglala* (CM 4). The claim as outlined in your letter should have been filed not later than 3 Jul 1953. Since it was not filed within the statutory period, it would be necessarily denied, according to our experts.

Any question concerning retirement is an important one in the Navy so we again turned to the experts to find an answer for your second question. Personnel who were transferred to the Fleet Reserve and released to inactive duty upon completion of 19 years and 6 months of service and are later found not physically qualified are placed on the retired list by reason of physical disability. This is in accordance with the Naval Reserve Act of 1938 (Section 6331, Title 10 USC). They would not be recalled and discharged with severance pay. In this case, the action would be the same whether the individual had completed the 19 years and six months of service or a full 20 years.—Ed.

Cut Off Date for Officer's MOP

SIR: It has been brought to my attention that mustering out pay, under the Veterans Readjustment Assistance Act of 1952, will terminate for any commissioned officer, otherwise entitled, who is discharged or released from active service more than three years after 31 Jan 1955 (Navy Comptroller Manual, 044165, Subsection 7).

I am interested to know when such

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept., Washington 25, D. C.

a cut-off date was established, and if any extension of the cut-off date—31 Jan 1958—is contemplated for people in my category.

Upon completing three years' active service in July 1957, I extended my active service for a two-year period. If, instead of extending, I had elected to be released from active duty, I would have received \$300 MOP at that time. However, I unknowingly jeopardized my MOP when I chose to remain on active duty beyond the cut-off date.

I know there are always the "10 per cent" who never get the word, but I am sure I have many colleagues on extended active duty who will be as startled as I was when informed of the cut-off date. Maybe this letter will inform some other "uninformed" poten-

Top Multiple Score

SIR: During a recent "bull-session" the subject of discussion was focused on examination marks. Was I correct in saying that under the Navy's present scoring system for advancement in rate, the highest mark obtainable is 150?

To settle another point, can you tell me what are the three highest scores registered in an examination for promotion to E-7 (CPO)?—G.O.McG., BMC, USN.

• Chief, before you get into any "hot" arguments about final multiples, you'd better catch up on your reading and get the latest word. It is now possible, and has been since the August '57 examinations, to attain a final multiple of 180. This is broken down as follows: 0-80, examination score; a maximum of 20, for total active service; 20, for service in pay grade; 10, for awards, and up to 50 points for performance. (See pages 44, 45 and 46 of the Aug. 1957 issue of ALL HANDS for a detailed rundown.)

So far as your second question goes, it is regretted that examination scores for service-wide examinations are not disclosed by BuPers.—Ed.

tial extendees.—E. D. M., LTJG, USNR.

• On the surface, it would seem that you've received a bad deal. However, many officers are in the same boat.

MOP was set up primarily to benefit the non-career man whose civilian life was interrupted by service during the Korean emergency (although it also worked to the advantage of the career enlisted man and those career officers leaving the service before the cut-off date). The fact that someone agrees to remain on active duty after he could have been released is in effect a pretty good indication that his civilian life isn't too greatly interrupted, so that's how come you came to be left out. Naturally, it would have been better if you had known beforehand your extension would cost you your MOP, but as you say, there are always the 10 per cent.

The cut-off date was determined in a Presidential Proclamation of 1 Jan 1955. Therefore, you had about two and a half years in which to get the word.

At this time there is no legislation pending which would extend the cut-off date for officers in any category.—Ed.

Extensions for Reservists

SIR: I am a Naval Reservist with 11 years of active duty. Since I am over the age limit for transfer to the regular Navy, I am told I cannot extend my active duty period for more than a year at a time. If such is the case, I'll never have more than a year of obligated service. Therefore, will I ever be eligible for shore duty under the new Shorevay/Seavey concept?—J.W.H., BM2, USNR.

• You will be eligible for shore duty under Seavey when you meet the requirements set forth in the latest BuPers notice which pertains to your segment. However, under normal conditions, a minimum of one year's obligated service is needed to be ordered to shore duty within the continental U. S. under Seavey. This obligated service is computed from the month of transfer.

Naval Reserve personnel on active duty are not limited to extending their active duty to one year periods. According to BuPers Inst. 1133.10A, Naval Reservists on active duty may obligate themselves to perform additional active duty for periods of 12, 24, 36 or 48 months. If you wish to insure receipt of shore duty orders, it is suggested that you execute an agreement to obtain the necessary obligated service.—Ed.



IN HER DAY—Battleship USS Arizona (BB39) sails majestically through the seas in formation with other battlewagons during maneuvers at sea.

Sir: As a survivor of Pearl Harbor, may I strongly support the proposal by Chief Boatswain Bailey, published in the October ALL HANDS (page 33), to the effect that ships render passing honors to the remains of *uss Arizona*?

I disagree emphatically, however, that this should merely be a matter of tradition or custom. As you suggest in your editorial note, traditions are spontaneous and often arise quite casually. I doubt seriously, as a practical matter, that any great number of ships' captains, especially in these days of the finger-on-the-number, are going to undertake (spontaneously) any such conspicuous and official action as rendering passing honors.

Obviously, the answer is to *prescribe* the rendition of such honors to *Arizona*, in exactly the same way as commemorative passing honors are now prescribed for ships passing Mount Vernon (see *Navy Regulations*, Article 2185).

Chief Boatswain Bailey has made a notable recommendation. Don't let it die on the vine.—R. D. Heintz, Jr., COL, USMC.

Sir: I read with interest CHBOSN Bailey's letter concerning rendering passing honors to *uss Arizona* (BB 39) in the October issue of ALL HANDS, and I am in complete accord with his views on this subject. For the record, I have served in two ships since World War II that have entered Pearl Harbor on different occasions and each time we rendered honors to *Arizona*. The ships were *uss Valley Forge* (CVS 45) and

New Jersey (BB 62).

I, along with Mr. Bailey, and I'm sure many others, would like to see this become a Navy tradition. I had several friends in *Arizona* and I have always taken pride in rendering a salute to the memory of these men and the ship in which they served.—R. L. Moore, GM1, USN.

Sir: While in command of *uss Kenneth Whiting* (AV 14) from July 1953 to July 1954 and *uss Princeton* (CVS 37) from January 1956 to January 1957, I passed *Arizona* on several occasions. Each time I rendered passing honors just as though she had been a commissioned ship moored at the dock. I cannot remember whether there was something in the SOPA Instructions which called for these honors or not. Perhaps it was done on my ship because *Arizona* was my first ship as an officer in the Navy—way back in 1931. At any rate, I agree with CHBOSN Bailey that honors should be rendered.

If it is not contrary to Naval Regulations, customs or traditions, and it is not now included in the SOPA Instructions, I believe instructions should be issued so that all naval vessels would render passing honors to the *Arizona* Memorial.—W. E. Callaher, CAPT, USN.

Sir: I wholeheartedly agree with the letter in the October issue of ALL HANDS submitted by CHBOSN Bailey about rendering honors to *Arizona*

Passing Honors US

(BB 39) at Pearl Harbor. I believe this is the least we, the living, can do to honor those fighting men entombed in the hull of that great ship. If tradition is sparked by the men of the service, I sincerely hope that CHBOSN F. E. Bailey is credited with establishing the tradition of rendering honors when passing *Arizona*.—D. L. Foster, RMC, USN.

Sir: CHBOSN Bailey may be interested to know that a great many ships do render passing honors to *Arizona*. I have noticed during my three years in this area that carriers invariably render honors, cruisers usually do, destroyers sometimes, and other types rarely. So the tradition to which CHBOSN Bailey refers appears to be growing.—H. M. Easterling, CDR, USN.

Sir: In the October 1957 issue of ALL HANDS, CHBOSN F. E. Bailey, USN, has suggested that Navy ships render passing honors to *Arizona*. Mr. Bailey is mistaken if he thinks that all ships ignore such a courtesy. During the most recent deployment of *uss Philippine Sea* (CVS 47) we operated out of Pearl Harbor from the middle of January through March 1957; it was our practice to render full honors to *Arizona* upon each passing.—R. F. Ranney, ENS, USN.

Sir: There is no need for "tradition" to call for rendering passing honors to *Arizona*. *Navy Regulations* spells out the requirements for passing honors between ships of the Navy. In 1953, *uss Manchester* (CL 83) was required

by cable long way departure Passing 1 dered.

I believe the usual and Pearl *Arizona* are not which do *Arizona* around 1 —B. D. I

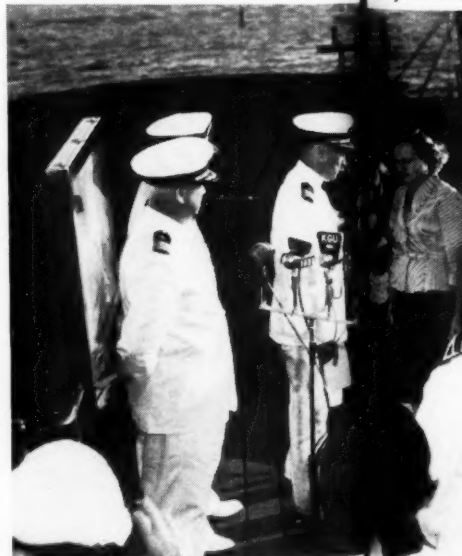
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As Com Destroyer DDE 714 DDE 498 positively dered. Th tice well c

Be assu ships of C and Com *Arizona* a queathed —H. I. M Div 252.

Sir: In F. E. Bailey's rendering honors many insta While o last July, (CVA 31 *Arizona* a

REMEMBERED — Wreath at foot of memory of me



USS Arizona

by cable laying operations to go "the long way" around Ford Island on her departure from Pearl to Long Beach. Passing honors to *Arizona* were rendered.

I believe it is considered that ships in the usual channel, between Ford Island and Pearl Harbor Shipyard, do not pass *Arizona* and, therefore, passing honors are not appropriate. However, ships which do not render passing honors to *Arizona* when going the long way around Ford Island are incorrect. —B. D. Ross, LT, usn.

SIR: It was with surprise that I read of the recommendation in your October issue of rendering passing honors to *Arizona*.

As Commander of Pearl Harbor-based Destroyer Division 252 (uss *Epperson*, DDE 714, *Renshaw*, DDE 499, *Philip*, DDE 498, *Nicholas*, DEE 449), I can positively state that honors are rendered. This tradition has been in practice well over a decade.

Be assured that our Pearl Harbor ships of CruDesPac, ServPac, SubPac and ComFourteen have not forgotten *Arizona* and the lessons she has bequeathed to succeeding generations. —H. I. Mandel, CAPT, usn, ComDes Div 252.

SIR: In reference to the article by F. E. Bailey, CHBOSN, about rendering honors to *Arizona*. He states that in many instances honors are not rendered.

While operating out of Pearl Harbor last July, *USS Bon Homme Richard* (CVA 31) always rendered honors to *Arizona* as did the destroyers. Other

memory of men entombed in hull below.



FINAL BERTH—Aerial photo shows *USS Arizona* today. Her decks are 15 feet below surface and a platform and flag have been erected on superstructure.

men I have talked to said that while in other ships they also rendered honors to *Arizona* when passing.—Bart West, AQ3, usn.

SIR: We sincerely agree with the Bos'n in that *Arizona* should not be forgotten and always remain in the memory of all Navymen and the people of the United States. The reason for this letter is to rectify one error in Mr. Bailey's letter which could give Navymen, not in the know, especially Atlantic sailors, the wrong idea.

I have been in several carriers and, going into and out of Pearl, we have never failed to go to quarters for Passing Honors when going by *Arizona*. Also, when we were moored on the far side of Ford Island, the coxswains of all the boats would render a hand salute when passing her.

I have checked with other people who were in other ships at one time or another and they cannot remember their ships ever not passing honors. We want the uninformed to know that we, of the Pacific Fleet, haven't forgotten *Arizona* and the Navymen entombed below decks.—C. W. Mainelli, AEC, usn.

SIR: One thing we still haven't got straight. Is or is not, *Arizona* still in commission—J. B. Etchingham, FP 1.

• As with all Navy ships sunk or destroyed, their names are stricken from the list. Actually, when a ship is sunk, there is no occasion for it to be officially decommissioned.

On 7 Mar 1950, an order was issued that the flag of *Arizona* should be raised and lowered as though on a commissioned ship.

The way it looks to us here, it would seem that the tradition suggested by CHBOSN Bailey is well underway.

In this connection we should like to pass on to those interested in preserving this tradition, a communication from the Commandant, 14th Naval District:

"The Pacific War Memorial Commission, an agency of the Territory of Hawaii, which expects to sponsor a fund-raising drive for a permanent *uss Arizona* memorial at Pearl Harbor, is conducting a search for any of the 298 surviving crew members who were attached to that ship when lost on 7 Dec 1941. Such survivors should communicate with: Mr. H. Tucker Gratz, c/o *uss Arizona* Memorial, Pearl Harbor, Hawaii."

For the benefit of those who came in late, *Arizona* was one of a number of U. S. Navy ships sunk at Pearl Harbor by the Japanese attack on 7 Dec 1941. Here's the story:

At 0758, *Arizona*, with the repair ship *uss Vestal* (AR 4) alongside, was hit by an aerial torpedo amidships and seven bombs, one of which (presumably a 1000-pounder) plunged down *Arizona*'s smokestack and exploded. Today, the rusted, twisted hulk of the once proud battleship still remains at her berth—a memorial to the 1102 men who went down with their ship that Sunday morning.—Ed.



It's Back Again — Who Fired That Last Shot?

SIR: I have read, at various times during the past 12 years, several dozen claims as to which ship fired the last shot during World War II. Most of these claims, as I remember them, were for 13 or 14 Aug 1945. I would therefore like to submit the name of *uss Heermann* (DD 532) for that honor.

While on radar picket duty in company with two or three other destroyers (the names of which I've forgotten), *Heermann* and the others were attacked by a lone Kamikaze at approximately 1305 on the afternoon of 15 Aug 1945. All ships opened fire and the plane was splashed about 200 yards astern of *Heermann*. Since all ships present opened and ceased fire within seconds of each other, it would be difficult to single out one of them as having fired last. Still, I'd like to think it was *Heermann*.—D. R. H., HMC, USN.

• Yours isn't the first claim for "last shot" honors to be put forth on behalf of *Heermann*.

Back in June 1946 *ALL HANDS* printed a letter which described the same incident. The official records

agree. They show that on 15 Aug 1945, *Heermann*, as part of Task Force 38, was steaming about 50 miles from the Task Force in company with *uss Black* (DD 666), *Bullard* (DD 660) and *Southerland* (DD 743) when the ships were attacked by a Japanese suicide plane which apparently hadn't gotten the word. All four ships reportedly opened fire at 1317 -9 zone time (0418 Greenwich mean time) and ceased firing at 1319 (0419 G M T).

However, there is a slight technicality involved in all this. *Heermann* and the others fired at the enemy plane after hostilities had officially ended, so there is some question about whether or not their shots could correctly be called the last of the war.

In answering the June '46 letter about *Heermann* we listed the leading contenders for last shot honors as they stood at that time. Surprisingly enough, *uss Pennsylvania* (BB 38) seems to be the only new name brought to light in all the discussions that have been taking place in these pages ever since. So, we added her name to the old list and came up

with the following chronology, based on Greenwich Mean Time, which shows how the various claims stack up against each other today:

0700 13 Aug 1945—*uss Tigrone* (then SS 419) used her deck gun to bombard a radio station and other buildings on Mikomoto Shima in the western entrance to Sagami Wan, Honshu, Japan.

1106 13 Aug 1945—*Pennsylvania* fired at a suicide plane which made a run on American shipping at Okinawa.

1924 13 Aug 1945—*uss Spikefish* (SS 404) torpedoed a Japanese submarine in the East China Sea.

1935 14 Aug 1945—*uss Torsk* (SS 423) torpedoed a Japanese coast defense vessel in the Sea of Japan.

2117 14 Aug 1945—*Torsk* torpedoed a second coast defense vessel in the same area.

2300 14 Aug 1945—Hostilities officially ended.

0417-0419 15 Aug 1945—*Heermann* and the other DDs fired at a suicide plane.

Now, whom did we miss this time? You'll let us know?—ED.

Looking for a Hurricane?

SIR: Being a member of Airborne Early Warning Squadron Four (VW-4) and having participated in flights in support of the Joint Hurricane Warning Center, I find your article, "Watch Out for These Ladies of the Sea" most interesting. It is gratifying to note the accuracy of the subject matter. However, I would like to mention one point which I feel is misleading.

ROUGH GOING—High seas make it rough for *USS Waccamaw* (AO 109) as she fuels *USS Cascade* (AD 16).



The article stated that penetration of the eye was accomplished by "flying roughly parallel to the winds." Entrance to the eye is normally accomplished by holding the wind fairly broad on the port wing or beam and, in exiting, the wind is placed on the starboard wing or beam.

The mission of the Warning Service is extremely important and my participation has provided a deep personal satisfaction in knowing that in some measure due to the efforts of VW-4, many lives have been saved that would otherwise have been lost without provision of adequate storm warnings.—D.A.H., LT, USN.

• Whether you enter the storm with the wind broad on the port wing (the recommended practice) or parallel to the flight course, our editorial hat is off to the Navy Hurricane Hunters. As you indicated, they are instrumental in reducing loss of life and property damage due to storm action.

One further word on technique:

A flight into a hurricane is at best a hazardous and rough trip during which the crew can do little but hang on and give mental support to the pilot. Picking the run-in spot is touchy business for it is the point at which the wind is the reciprocal of the storm's direction of movement. It can be passed up quickly and the plane carried into the severe quadrant of the storm. According to authorities the entrance is usually made in the left front quadrant of the storm. By keeping the wind fairly

broad on the port beam the drift will carry the aircraft through the weakest quadrant (left rear) into the eye of the storm.

Numerous low-level penetrations are made by hurricane hunters in the line of duty. During these flights the altitude can well dip below 500 feet to a point where sea spray carried by hurricane force winds will splash against the plane and turbulence will drive it down toward the waves below.

It is a rough job and VW-4 and all of the other units working with the Joint Hurricane Warning Center deserve much more than these few words of praise.—ED.

Role of the T-CVU

SIR: Reference your article in the October issue of *ALL HANDS*, page 26: "The passing of Badoeng Strait marks the active duty end of the 114 CVEs built during World War II..."

Don't write those CVEs off yet. Remember the four designated as E-CVUs: *uss Corregidor* (T-CVU 58), *Tripoli* (T-CVU 64), *Cape Esperance* (T-CVU 88) and *Windham Bay* (T-CVU 92). I believe I can speak for all of them in saying that although we do not now perform the functions of a CVE, that's what we started out as and we definitely are not inactive.

Corregidor for example, steamed about 86,500 miles last fiscal year and that may not be the highest figure among the four.

Incidentally, *Corregidor* now has a

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"new look" resulting from installation of two cranes on the flight deck. This eliminates our requirement for crane services in loading and unloading the aircraft we normally carry.—J. T. Lowe, Jr., Capt, usn CO, uss Corregidor.

• We detect the note of pride in your letter for the gallant escort carriers that established amazing combat records in World War II and during the Korean conflict. However, according to the Navy's rolls, there are no active CVEs serving with the Fleet. We did not intentionally overlook the four escorts converted to T-CVU status for duty with the Military Sea Transportation Service. Their work is the type that derives little glamour and even smaller amounts of coverage in military and civilian press, but their importance cannot be denied.

Take Windham Bay for instance. Her trips in the Pacific since mid-June 1957 have carried her to Yokosuka, Japan; Manila, P.I.; Saigon, Vietnam; and Bangkok, Thailand. She steamed a total of 27,596 miles on her appointed rounds. Outbound from the U. S. she carried more than 50,000 measurement tons of cargo including 135 planes. Inter-theater and return voyages added another 28 aircraft included among 18,000 additional tons of cargo.

On the Yokosuka via Pearl Harbor run is Cape Esperance. Since last June she has steamed a total of 44,325 miles and carried some 88,448 measurement tons of cargo. Like her three sisterships assigned to MSTS runs, her principal cargo has been aircraft. During the last half of 1957 she carried 302 planes to and from the United States.

Serving in the Atlantic with Corregidor is Tripoli. Since July she has made three trips to Europe carrying more than 33,000 tons of cargo. More than 100 aircraft were included on her



SHIP-TO-SHIP mail is dropped to USS Salem (CA 139) at sea while USS Lake Champlain (CVS 39) and a DD are fueled by USS Caloosahatchee (AO 98).

manifests during this period.

All of the MSTS assigned carriers make about seven trips per year, each one averaging about 45 days and touching at two to three ports. All are 512 feet long and displace 7020 tons (light). They are outfitted to carry more than 300 troop-class passengers and 85 cabin-class under normal conditions. This could of course be increased in times of emergency.

The MSTS carriers really keep busy. Tripoli once steamed 8742 miles during 588 of the month's 720 hours. Another 72 hours were spent loading and unloading cargo and part of the 60 "free hours" were spent fueling. When this claim was made Corregidor immediately came back with a report of steaming 9042.3 miles during one month and spent only 94 hours of the month's 720

in port. Forty-six hours were consumed in loading and offloading and a large part of the remaining 48 was utilized for the purpose of fueling and awaiting favorable tide.

These figures are quoted here as an indication of the schedule these ships operate on and not in an attempt to establish a record for T-CVU type ships.

A quick rundown of Navy records established some interesting facts about the present status of these carriers which are small in size, but large in courage. More than 65 CVE, CVHA, CVHE, CVL and CVU types are still carried in the register. Only five of these are still on active duty, the four MSTS carriers and the assault helicopter aircraft carrier uss Thetis Bay (CVHA 1)—Ed.

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Ship Reunions

News of reunions of ships and organizations will be carried in this column from time to time. In planning a reunion, best results will be obtained by notifying The Editor, ALL HANDS Magazine, Room 1809, Bureau of Naval Personnel, Navy Department, Washington 25, D.C., four or more months in advance.

• **uss Arizona (BB 39)**—The second annual reunion will be held on 12 April at the Jack Kennedy Center, Naval Base, Terminal Island, Long Beach, Calif. For further details, write to W. E. Larsen, 4019 West 176th St., Torrance, Calif.

• **Waves** — Waves will celebrate their 16th birthday with a reunion to be held in Detroit, Mich., on 25, 26 and 27 July. For additional information, write to Waves National Reunion Committee, Room 421, Federal Building, Detroit 26, Mich.

• **uss William D. Porter (DD 579)**—A reunion has been scheduled for 15 March at the Biscayne Terrace Hotel, Miami, Fla. Inquiries may be addressed to H. Seward Lewis, 1442 N.W. 7 Court, Miami 36, Fla.

• **107th Naval Construction Battalion** — The fourth annual reunion will be held on Labor Day weekend at the Hotel Governor Clinton, New

York City. For details write to Samuel B. Gross, P.O. Box 732, Westhampton Beach, N. Y.

• **uss Canisteo (AO 99)** — All former crew members who served on board from January 1951 until December 1955 and who are interested in a reunion, with time and place to be decided by mutual consent, may write to Daniel Rizzo, YN1, usn, c/o USNRTC, 52nd St. and 1st Ave., Brooklyn 32, N. Y.

• **uss Marblehead (CL 12)** — All hands who served on board this ship from 1939 to 1942 who are interested in holding a reunion during the summer of 1958 may write to R. L. Lane, EMC, RFD 4, Box 150, Norfolk 6, Va.

• **uss Peiffer (DE 588)** — All who served on board during World War II who are interested in holding a reunion, with time and place to be decided, may write to Charles F. Richardson, 329 Taylor Rd., Knoxville, Tenn.

• **uss South Dakota Veterans' Association of WW I** — The 37th annual reunion of the World War I crew will be held in Portland, Ore., on 12 April. For further information, write to Carl Hagglund, 2519 N. E. 59th Ave., Portland 13, Ore.

Portholes AND Eyeports in Subs

SIR: In your August issue you stated that submarines did not have portholes. This is to inform you that subs of the R and of the S class *did* have portholes. Although they were called eyeports, you could still see through them. They couldn't be opened.—J. J. Byrnes, TM1, (SS) usn, and H. A. Hottendorf, TM1 (SS) usn.

SIR: In the August edition you agree with C. E. K., YNC(SS), that the photo of a submarine bridge and officer of the deck appearing on page 47 of the April 1957 issue was not part of a submarine but a surface vessel.

Almost any pre-WW II submariner will agree that the photo is definitely a submarine, probably that of the bridge

on a submarine of *Salmon*, *Sargo*, or *Seawolf*, class.

I would like to invite you to re-read the story in the April issue of the exploits of *uss Salmon* (SS 182) (I assume everyone has read this story at least once) and note particularly that *Salmon* survived a dangerous situation by sticking to her guns.

May I suggest that hereafter you, too, stick to your guns and guide these young fellows like C. E. K., YNC, back on a straight and proper course such as was undoubtedly steered from the forward wheel, a part of which is visible on the submarine of which the subject photo was made.—J. Brown, RMC(SS), usn.

• We certainly want to thank you oldtime submariners for contributing

to the accuracy of ALL HANDS, as Chief Brown suggested, we are sticking to our guns.

If you read the letter in question, which appeared on page 19 of the August '57 issue of ALL HANDS, you'll see we never said that submarines did not have portholes. We said . . . "As far as the picture goes, (shown above) you've got us there too, even though we didn't come right out and say, 'This photograph was taken in a submarine.'"

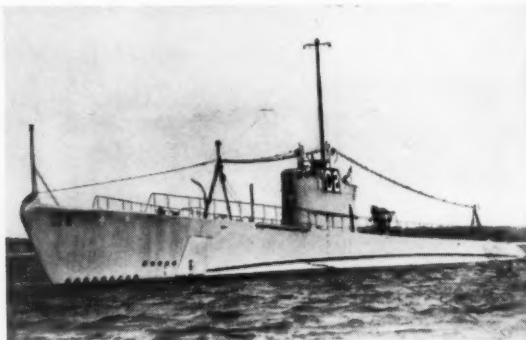
So, sticking to our guns, we repeat, we never did state in our August issue that submarines did not have portholes.

In regard to the letter from Byrnes and Hottendorf, technically we must say that "R" and "S" class submarines DID NOT HAVE PORTHOLES. They did, however, have eyeports. It must be remembered that portholes are for light and ventilation and therefore must be capable of being opened and closed. Eyeports, which are usually found on the bridge of all modern submarines, can be seen through, but not opened. You may have noticed there's no need for any ventilation on the bridge of a sub.

Now, back to the picture in question. As you can see, the officer of the deck is looking through a porthole. The Naval Photographic Center tells us that the picture was not taken aboard an ASR or other type surface ship, but the submarine C-2. This number is plainly visible on the back of the steersman's foul weather jacket.

The C-2, strangely enough was originally designated the V-9, and later given the numbers SS 171 and named *uss Cuttlefish*. The V-9, C-2, SS 171 or *Cuttlefish*, regardless of what you call it, definitely had portholes—see below picture—as most submarines built in the 1920s and 30s did. This particular sub, completed in 1934, was about 275 feet long, and at that time displaced about 1120 tons. Because of the design of her original engines (with direct drive) *Cuttlefish* was refitted with new engines and redesigned.

Incidentally, some old-timers tell us that you should say "port" or "air port" instead of "porthole." We'd like comments on this.—Ed.



PORT HOLES ON SUBS — Photo on the left was taken on board *USS Cuttlefish* (SS 171) shown at right as sub C-2.



PHs at Pensacola

ALMOST ANY PLACE you go nowadays you run across a camera enthusiast. However, the naval aerial photo students are among the few who can literally say they are up in the air over their photography.

Students in the Aerial Phase of PH "A" School at the Naval Air Technical Training Unit at Pensacola, Fla., are being taught how to become skyborne shutter bugs. Training covers everything from souping the long negatives to the maintaining of nuts and bolts of their complicated cameras.

Top: Drying of aerial film is explained to PH student. *Top right:* Unusual photo machine is a strip printer. Its operation is part of aerial PH training at Pensacola. *Right:* Students check roll of strip print with their teacher to learn the fine points on which they will be graded. *Lower left:* Instructor briefs student in preparation for a photo training flight. *Lower right:* Strip prints are overlapped and glued to make mosaic map.





Every Navyman's A

JOIN THE NAVY and see the world is a recruiting pitch that is as old as the Navy itself. In spite of the jokes to the contrary it still stands good today. Sailors cover more ground than just about any other serviceman and see places and sights that folks back home only dream about.

It is only natural that with such travel opportunities photography should be a popular hobby in the Navy. These two pages of pictures show sailor shutter bugs using the world for their studio. Whether equipped with a simple box-type camera or a fancy high priced job, the Navyman can't miss taking interesting and colorful photographs as he enjoys liberty in foreign ports. His personal photo album can easily become an object that will make the folks back home envious of

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Top left: Sights of Singapore's Tiger Balm Garden are preserved on film. *Top left center:* Carriermen photograph their ship in harbor at Marseilles, France. *Top right center:* Friends overseas are snapped during Paris liberty. *Top right:* Seeing is believing and sailors with three-eyed tuatara in New Zealand have proof. *Right:* Famous land mark of Pisa has often been photographed by Navymen. *Lower right:* Swiss maids make good subject for Navy shutter bug. *Lower right center:* Philippine fisherman is another subject for a try at contest prize. *Lower left center:* Souvenir for the folks back home is taken by shipmate during tour of Algiers. *Lower left:* Navymen in Japan are surrounded by interesting subjects. *Left:* Roman Colosseum.



HANDS

FEBRUARY 1958

HINTS ON WHERE-WHEN-WHAT



AT SEA... foul weather

Don't wait for perfect weather—life aboard ship goes on. If you venture out on the deck in foul weather, observe the ship's safety rules. **CLIMB CAREFULLY.** Watch out for slippery decks. Lash the camera to you so that you can have two hands free if necessary. Neck and wrist straps are available. Salt spray can ruin camera and lens. Use temporary cover of plastic bag.



AT SEA... fair weather

Don't load in bright sunlight. Use your body as a sunshield. Colored and polaroid filters are a must at sea. Check your film package instruction sheets.



ABOVE DECKS

Make sure halyards, lifelines, wires, etc., are not crossing your picture too close to the camera. Get depth in your composition by keeping part of your ship in the foreground.



BELOW DECKS

With the fast films available, flash is no longer necessary indoors. Don't point your camera at light source. In close quarters, "bounce" your flash off the bulkhead or overhead. Use of handkerchief to cover flash unit will help.



FROM THE AIR

Use as fast a shutter speed as you can. Do not brace camera against port. Hold it against yourself or pillow to absorb vibration. Include portion of wing, engine or tail in your composition. Filter and lens hood are standard. Patterns of city lights are easy with fast films.



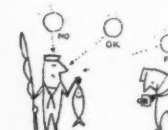
ASHORE—IN THE COUNTRY OR IN THE CITY

Tell a story—covering your adventures or the activity at hand. (Building, carrying, driving, selling, shopping—even waiting and sleeping). Keep shots simple. Close-ups of people, animals, textures of walls, old wood, shapes of trees, houses and folks all are interesting to others if it interests you. If they are strangers—particularly in a foreign country—request permission first. Just because the sun isn't shining, don't put your camera away. Rain can be pictorially exciting, too. Just like your ship, the city and country are busy places from sunrise to lights out and later.



IN THE SUN

Avoid noon sun (or overhead lighting). Mid-morning and mid-afternoon is just about right (45 degree angle). Avoid hard side lighting (late, late afternoon) for color slides. Use white card or aluminum foil as reflector to lighten extreme shadows. Better still, use flash. Don't shoot with the sun in back of your subject. If you must—expose for the part of the subject which will be center of interest. With people, expose for flash tones.



AT NIGHT

Just because the sun went down, don't pack up your camera. A tripod and shot taken on "T" (time) or "B" (bulb) will do the trick. Don't be afraid to experiment. A cable release will minimize camera movement. Double or triple exposures—on purpose—can be creative fun. Try it on fireworks, traffic movement, harbors and lightning storms. Wet nights are good because shiny surfaces reflect light.



ANIMALS AND PETS

Use reasonable care in selecting your subject because the first helpful hint is to get up close. Feeding usually alerts the subject. Keep background simple—such as sky, bulkhead or a piece of card in the case of smaller creatures. Kiddies and cuties get same treatment.



ACTION—SPORTS, DANCE, WORK

Speed: Understand the action and wait for the peak of the jump, turn or catch.

Background: Watch your subjects move, then maneuver to a position that will give you a clear sky or contrasting background (light subject—dark background). Preset your focus on where the action will take place. Throwing the confusing detail in the back out of focus also helps. Low camera angles are always good.

Composition: Shoot action as it comes toward you rather than broadside which shows blur more readily. "Slewies" or "panoramas" like a gun takes practice... don't rely on it. Fill your picture area. Sometimes the best shots of an action or sports event are not in the peak action but in the preparation tension and the aftermath of victory celebration or defeat depression.



MAKE A PICTORIAL RECORD OF YOUR TRIP

The "once-in-a-lifetime" experiences of the trip are the key to new friendships and the means to lasting memories.

FACTS BEFORE YOU BUY

Basically alike, all cameras will take good pictures. Even a box camera is as versatile as its operator. Choose a camera that meets your particular needs and budget. There are advantages and disadvantages to each type of camera. Decide first what you want to do with photography, check below to find out which camera will best do the job, then get the best you can afford.



SHUTTER is compared to your eyelid—except it is always closed and "sees" nothing until the moment of snapping the picture. Set your shutter speed faster to catch moving objects—slower, for stationary subjects.

BOX AND FIXED FOCUS CAMERAS

Advantages: Inexpensive, foolproof, rugged. Anyone can take pictures under specific conditions. Uses inexpensive roll film that is always available. Contact prints are suitable for album use.

Disadvantages: The fixed lens setting, aperture and shutter speed limits its use. Not recommended for fast action shots, technical copying, night photography or closeups.

FOLDING ROLL FILM CAMERA

Advantages: Compact, lightweight, easy to operate. Roll film is inexpensive and available everywhere. Ideal for album contact prints and enlargements. The cost varies depending on type of shutter, lens and rangefinder equipment.

Disadvantages: Folding mechanism and bellows must be handled with care. Lenses not interchangeable.

TWIN LENS REFLEX

Advantages: Quick action, rugged, easy to operate. Closest ideal camera for average Navyman. Composition is made up because what you see is what you take and the image is the same size as the negative. Excellent for all light conditions. Good at negative (3 1/2 x 2 1/4) for contact prints. Fine for enlargements. Usually good selection of all types of film—available and inexpensive. Color slides can be made this size or smaller with use of the adapter. Excellent cameras at all price ranges.

Disadvantages: Lenses usually not interchangeable. Watch parallax and distortion in extreme closeups. Lack of perspective may distort image.

SINGLE LENS REFLEX

Advantages: Compact, lightweight, fast-shooting, easy to handle, versatile. Has all the advantages of the twin reflex and film cameras and still has no parallax problems—no ideal for extreme closeups. (Parallax is the difference between what you see and what the lens actually takes when real close to subject.) Lenses can be easily interchanged.

Disadvantages: Relatively expensive.

FLASH ATTACHMENTS

are available in many sizes today (yes, even in color) you will be sure to find one that meets your needs. Follow film instructions for proper exposure meter.

NATURAL LIGHTING: Investigate the new superfast films on the market (black and white and color) and experiment with existing light conditions. Fold sheets of aluminum foil in your kit to improvise reflectors.

LIGHTING BACK: Inside the factors of purpose, use these building yourself a pro.



Use aluminum foil as a handy "reflector."

CAMERA CARE

SALT WATER is rough on cameras. Wipe off salt water spots on lens with lens tissue. A plastic zipper bag is a handy holder until you are ready to shoot. After shooting, check camera thoroughly for spray spots. Wipe off immediately.

REPLACE LENS CAP immediately when camera is not in use. Keep a spare handy.

ACCESSORIES SHOULD FIT EXACTLY. Don't buy adapter rings and flash connections that almost fit. If necessary, order from manufacturer.

STOW CAMERA CAREFULLY—not uncovered where it will pick up dust and lint. Avoid hot pipes.

KEEP LENS AND FILTERS CLEAN with a soft lens brush or antistatic brush. Lens tissues should be kept handy. Don't use eye-glass tissues that contain silicon.

NEVER OIL your shutter.

DON'T FORCE ANY PART of a camera. Take it to a qualified repairman.

LOAD WITH CARE!! Watch out for dust in the workroom and sand at the beach. Make sure film is loaded straight and tight.

SHIPMATTERS

Position of subject? Comfortable!

Keep (space)

CAMERA HIGH to avoid double chin. to shorten long neck.

Keep background simple. Avoid objects directly in back of subject that confuse important lines.

HORIZONS should be horizontal.

GROUP SHOTS are valuable memory refreshers. Try to get even lighting and every face in view. Have small groups doing something. Make a diagram to get proper names.

CENTER OF INTEREST is just above the waist. You are usually most interested.

BALD MEN by casting a shadow on your head or a piece of card.

Shade highlights by casting a shadow on your head or a piece of card.

Shade eyes by casting a shadow on your head or a piece of card.

GOOD TASTE in subject is in the eyes and the mouth. Some that have...

CO OF YOUR NAVAL CAREER

of the family can be recorded for the future and shared. This picture-taking hobby and conversation maker can be the memory library of old Navy friends the world over.

ACCESSORIES

On the lack of "things to adjust" on the box camera eliminates many problems—but its use is more limited under many conditions. The flexibility of more complicated cameras allows you to take pictures almost anywhere. You can adapt the utility of these cameras to more extreme distances and light situations by adjusting the FOCUS, the APERTURE and the SHUTTER SPEED.

FOCUS is defined as the distance between the lens and the subject. It is the distance from the lens to the subject. You have to vary the size of your lens opening to pass more (or less) light on to the film.

35MM MINIATURE

Advantages: Compact, lightweight, inconspicuous. It is best for fast candid shooting under a wide variety of conditions. Black and white and color film available everywhere and is inexpensive. Lenses are interchangeable for telephoto, wide angle and microscopic closeup work. Perfect for close coverage and for lecture projection slides. Easily stored and carried.

Disadvantages: Large film load (36 or 90 exposures) makes quick development of single shots impractical. Enlargements are necessary and are expensive. Watch for camera movement in shooting. Slightest touch of lens, small scratches or fingerprints on lens and film shows in album enlargements.

PRESS CAMERA

Advantages: Large negative, pin-point focusing on ground glass. The rugged, all-purpose camera is most commonly used by news photographers. Single shot can be processed immediately. Film pads and roll film adapters are used for quick sequence shooting. Excellent for portraits, group shots, copying and action. Film available in a great variety of emulsions. Lenses interchangeable. Can be rigged as an enlarger aboard ship. Makes excellent contacts.

Disadvantages: Conspicuous, bulky, heavy. Film is comparatively expensive.

"PHOTO-IN-A-MINUTE" CAMERA

Advantages: Develops pictures on the spot (1 minute). Fine for rush report and operational work. Subject can be reshot immediately to correct error in exposure or composition.

Disadvantages: No negative for reprint and darkroom control. Prints must be sent to manufacturer for copies.

STEREO CAMERA

Take your ship in 3D! This fascinating luxury-type photo set-up is based on the same principle as parallax's stereoscopic viewer. These pictures must be viewed and projected with special equipment.

are available in many. However, with the superb film available, it will be used in the best light conditions available indoors and out. See instruction on how exposure meter.

FLASH BULBS vs. SPEEDLIGHT. Both are efficient and excellent. Choice depends on work load, storage facilities and budget. **CAUTION:** Aboard ship or in aircraft, high frequency electronic beams may set off flash bulbs. Don't carry bulbs in pocket.

MAINTAINING PORTRAITS

Keep subject away from background (especially with flash).

CAMERA LOW to shorten body lines, to make subject look taller.

BALD MEN make highlights by casting a shadow on the back of the head.

GOOD TASTE. . . . You may be sorry later if subject is in need of shoes, out of uniform, or shows and insignia wrong. Check your model. Shows that hot. Roll down sleeves.

EXTRA GEAR

CAMERA CASE will give protection from bumps, bangs, scratches and weather.

EXPOSUREMETER: Properly used it measures brightness to insure a correct exposure. This is your most valuable acquisition—after your camera and case.

CABLE RELEASE: An important aid to minimizing camera movement in shooting at low shutter speeds. Hold it loosely and unlinked.

TRIPOD: Don't hand-hold shots at slower speeds than one twenty-fifth of a second. For perfect steadiness of camera during exposure, a tripod is the answer. Pick out a sturdy, lightweight one. Rubber tips are more useful than spike tips.

FILTERS: A yellow filter is recommended for most work outdoors in the sun for black and white film. At sea filters protect lens from salt spray and flying particles. Orange, red and green filters give dramatic special effects on water, clouds, ship's gear and portraits. Check instruction sheet with filter for exposure allowances.

LENS HOOD: Prevents light flare caused from light entering lens from side angles.

CLOSEUP LENS: For extreme closeups, portraits and copy work, additional lenses and attachments are worthwhile.

PUTTING YOUR PICTURES TO WORK

AS A RECORD TO SHOW OTHERS—ALBUMS

Plan your album so that it not only includes the past but grows with the years. Don't think of it as one book—but as a system which will best suit your needs for the future. It's not too late to start here are some suggestions.

PLAN I STRAIGHT CHRONOLOGICAL ALBUMS

Insert pictures as you take them. Label albums by year.

PLAN II CLASSIFIED SUBJECTS ALBUMS

Keep your pictures together in several general groups. For example: keep a separate book for "Family History," a book for each member of the family; each Navy branch or cruise, each ship or station. Special occasions such as crossing-the-line parties, birthday parties, vacation tips, family reunions, church or club activities, all make lively presentations.

PLAN III FAVORITE PHOTO DISPLAY ALBUMS

Make enlargements or carefully cropped contact prints of your best shots to make a pleasing and impressive exhibit of your favorite subjects.

MOUNT PHOTOS with dry mounting tissue for the nearest and most permanent job. You can use an ordinary flat iron or electric iron for this. Hanging small prints at the top with a piece of masking tape is another excellent method—especially if you want to keep data on the back of photo. Water mixed paste buckles prints and rubber cement deteriorates in time. Paper corners do the job, but pictures are too easily borrowed.

FILE YOUR NEGATIVES CAREFULLY in a paper envelope or transparent negative preserver to protect them from dust, scratches and fingerprints. Mount a contact print on each envelope as an aid to identifying negative, checking density and quality. Amange by date or subject. Be sure to mark caption data for future reference.

CRUISE BOOKS AND SHIP'S PAPERS

Your cruise book committee will welcome informal snapshots in good taste that were overlooked by the ship's photographer.

PUBLICITY AND PUBLIC RELATIONS

Enter the Annual All-Navy and Inter-Service Photographic Contest and many other contests that are open to all. Navy subjects are among the most colorful. Public interest is always keen for picture stories of Navy life and travel. Newspapers and magazines are always interested in usable material. (ALL HANDS Magazine is certainly interested.) Check with your security officer for clearances. Be sure to pack pictures with care. Do not roll or fold. Don't write on back. Attach caption with cellulose tape so that can be removed. Glossy prints, 8 x 10, are best for publication.

PHOTOS—THE PERFECT GIFT

Send home a snapshot with each letter. A picture can give the folks at home a chance to share your experiences. A photo of your ship is an ideal Christmas or birthday gift to a shipmate. Even your worst shots can be an aid to remembering someone, somewhere—some day. Great- ing cards can be photographically custom-tailored to your cruise, special occasion or thought. Saves you money, too.

SHIP AND HOME DECORATIONS

Even ordinary shots can be made dramatic when blown up to larger sizes and framed or mounted. It is not necessary to frame them under glass. Mount your print with dry mounting tissue flush with the edge on pressed wood, wall board or heavy card. Spray it with plastic spray to preserve it or coat it with butcher's wax and polish it for that satin finish. Unlimited possibilities for your ship's library, EM club or den at home. Seagull prints lend themselves to oil coloring better than black and white.

COPY WORK FOR BULLETIN BOARD

Before you copy anything—check for copyright and reproduction regulations. See your Security Officer for Navy regulations and federal laws.

SLIDE SHOW AND LECTURE MATERIAL

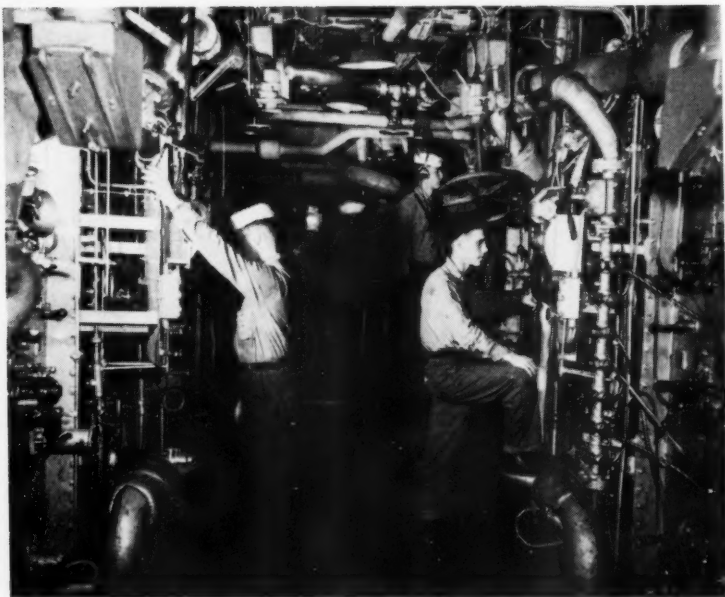
Your trips overseas can be shared with family and friends, clubs and church groups for many years to come through a lively selection of colored slides. Don't forget to keep a record or diary of dates, places, and experiences.

GOODWILL AMBASSADOR

If you do take pictures of new friends overseas, jot down their addresses and send them, or their relatives in the U. S., a print as a pleasant surprise. You'll be very welcome next time you pass that way. **WARNING**—before taking pictures of "natives," check local customs on picture taking taboos of religious ceremonies, festivals and veiled women. Get permission first.



★ ★ ★ ★ TODAY'S NAVY ★ ★ ★ ★



PIPE THIS—A member of the deck gang might be confused by this maze of pipes, dials and valves but not the fireroom gang of USS Essex (CVA 9).

Nuclear Power School

The cornerstone of a new Nuclear Power School was laid during the closing days of 1957 at the U. S. Submarine Base, New London, Conn. RADM Hyman G. Rickover, USN, Assistant Chief of the Bureau of Ships for Nuclear Propulsion, who is credited with being the father of nuclear submarines, guided the stone into place.

This building, which will be completed in June, will be the Navy's first permanent Nuclear Power School. Nuclear power courses have been offered at the submarine base since 1956 and more than 400 officers and enlisted men have graduated.

Costing a million dollars, the new structure will house 62 rooms, including classrooms, laboratories, offices and an auditorium. When completed the building will be known as Cromwell Hall. It takes its name from one of the submarine force's greatest heroes of World War II, CAPT John P. Cromwell, USN, who rather than hazard the possibility of revealing a complex opera-

tion to the enemy, went down with his submarine.

Speaking earlier at the Submarine Base, ADM Rickover termed the atomic submarine "an underwater satellite moving rapidly through the vast oceans—almost as hard to detect and destroy as a satellite orbiting the earth's atmosphere."

Citing the need for well trained men in every field of science, particularly atomic power, he explained, "To build and man a nuclear Navy demands a higher order of administrative and technical competence, as well as new concepts in matters of personnel, of tactics and of strategy."

'Private Eye' Checks Guns

An electronic "private eye" that investigates the accuracy of an interceptor's guns without firing them, and does it in flight in minutes instead of hours, is under development for the Bureau of Aeronautics.

Although the tester was designed for a specific armament control system, it can be adapted for most aircraft with all-weather capability.

The test equipment weighs less than 15 pounds and is built into the plane as an integral part of its electronic gun-aiming system. The unit reduces the time required for a complete check of the system from a matter of several hours to less than three minutes. In addition to being faster, testing now can be done more often, under better conditions on board ship, and by less highly-trained personnel.

The six-step checkout process involves feeding artificial signals into the system under test to simulate combat conditions. The test equipment gives a realistic problem to the gun-aiming system so that the pilot or technician can tell if different components are working properly by interpreting the signals that appear in the cockpit.

The pre-flight test unit also allows a pilot to practice "dry runs" without leaving the flight deck. Either practice or testing can be done during periods of Fleet blackout without fear of detection, for the radar does not release any energy into space during these closed-circuit periods.

Use of the test equipment is not limited to grounded aircraft. A pilot can perform the same tests while flying to his target, if he has to be-

YESTERDAY'S NAVY



On 5 Feb 1942 the National Naval Medical Center at Bethesda, Md., was established. On 9 Feb 1943 organized Japanese resistance on Guadalcanal ended. On 14 Feb 1813 USS Essex rounded Cape Horn, becoming the first U. S. warship to do so. On 16 Feb 1804 LT Stephen Decatur burned the frigate Philadelphia in the harbor at Tripoli after pirates had captured her. On 17 Feb 1864 the Confederate submarine Hunley blew up and sank USS Housatonic off Charleston, S. C. On 22 Feb 1909 the Great White Fleet returned to Hampton Roads, Va., after its famous cruise around the world.

come airborne in an emergency, without the pre-flight check of radar and computer equipment. This will eliminate the possibility of flying into combat with the plane's armament control system needing adjustment.

The new device also allows the returning pilot to determine if repairs are needed before he lands, thereby reducing "turn-around" time needed to get the aircraft back into combat.

Increased employment of aircraft is cited as another advantage of the new development. The faster, more frequent tests will reduce the number of planes grounded for adjustment of the control system and thus will increase the number of combat-ready interceptors.

Relatively inexperienced men can check the control equipment by turning several dials according to simple instructions. Maintenance men no longer will have to move portable test equipment across crowded flight and hangar decks to the side of each aircraft to perform these checks.

42 E's Out of 60

The Gladiators of Attack Squadron 106 have returned to NAS Cecil Field, Florida, after a five-week deployment at Guantanamo Bay, Cuba. They brought home with them 42 coveted Navy E's.

During their deployment VA-106 flew its *Cougars* on 841 sorties while compiling 679.6 flight hours. To accomplish this feat the squadron maintenance department and line crews maintained 97.6 per cent availability—an outstanding record for a squadron of F9F-8s.

During the 33-day period the Gladiators expended 3442 practice bombs while performing three types of special weapons deliveries. This training period was climaxed by a series of competitive exercises during which VA-106 pilots earned 42 E's out of a possible 60. Every pilot in the squadron succeeded in bringing home at least one E, while six of them won three each.

A Plank and a Piece of Cake

The crew of the heavy cruiser *USS Des Moines* (CA 134) has celebrated the ship's ninth anniversary of commissioning by cutting a huge birthday cake and passing out nine Plank Owner Certificates.

Since her commissioning 15 Nov 1948, *Des Moines* has had eight tours of duty with the Sixth Fleet.



PALM-FRAMED *USS Ranger* (CVA 61) is admired by Dominican children.

Ranger Hits First Liberty Port during Shakedown

USS Ranger (CVA 61) has returned home after conducting an eight-week shakedown cruise in the Caribbean and visiting her first foreign port, Ciudad Trujillo, capital of the Dominican Republic.

The 60,000-ton carrier, described as one of America's most potent weapons for peace, saluted the Dominican capital with the customary 21-guns when she steamed into the port for a two-day visit.

Immediately the international visiting began with liberty parties streaming ashore and hundreds of Dominicans coming aboard for a closer look at the massive aircraft carrier. The American sailors who went ashore had an opportunity to visit the oldest existing Spanish settlement in the new world. Rebuilt after the disastrous hurricane of 1930, the city's broad avenues and modern buildings contrast

sharply with the older section which contains excellent examples of a Spanish colonial town of the 16th Century.

The *Ranger* softball squad played local teams and a reception, given by the Dominican government, honored the ship.

The more than 3000 visitors aboard *Ranger* saw the newest weapons, equipment and carrier in the United States Navy. Many were awed by the tremendous size of the flight deck (252-feet wide, 1046-feet long) which is capable of handling atomic bombers and supersonic fighters.

The ship, newest in the line of *Forrestal*-class carriers, will journey to the Pacific early next summer and make Alameda her home port. The months before she steams into the Pacific will be spent in training operations.

FULL dressed *Ranger* awaits visit from top Dominican Republic officials.





LANDLOCKED SAILORS of NAS Hutchinson, Kans. enjoy visit to state fair and (rt) shoot pool in servicemen's center.



Aloha, Hutchinson

NAS Hutchinson, Kans., is on its way out of the Navy. Located in the heart of the mid-west prairies, some 600 miles away from any sizable body of water, the famed naval activity will be disestablished on 1 Jul 1958.

For the past 15 years the sea surrounding the air station has been the waving crops of wheat in the fields. Its only contacts with ships were with those of the plains—giant combines harvesting the grain.

This prairie air station began life as a primary training base covering 2656 acres of land. By 1944 more than 2500 cadets had completed the first stage of their aviation training there. During World War II more than 4000 enlisted personnel, students and officers were stationed at the Naval Air Station.

At the end of World War II the station was deactivated, but in June 1952 the increasing tempo of the Korean conflict caused the reopening of Hutchinson. This time it became a part of the Naval Air Advanced Training Command and the throb of giant multi-engined patrol planes echoed through hangars where years earlier the snarl of the famed N2S "Yellow Peril" trainer had been a familiar sound.

Four-engine PB4Y *Privateers* were the first to arrive for the new training mission, but within months they had been replaced by P2Vs and S2Fs. At present Training Units 604 and 614 operate more than 100 of these aircraft.

The community which gave the Naval Air Station its name grew to be as much a "Navy Town" as Nor-

folk, San Diego or a host of other coast communities that could be named.

Liberty opportunities in the city are many. Each fall the Kansas State Fair rolls into town. A service club is a popular place for Navymen on liberty and the prairie state farmers have taken the Navy people into their homes.

A relatively small city, Hutchinson recognized the housing problem and the local Real Estate Board extended a helping hand to men trying to find homes for their families. Cooperation in every phase of daily life between the civilian community and the Navy has marked the relationship found there.

The primary reason for selecting Hutchinson for disestablishment over other naval air facilities is that con-

tinued operations there for more than two or three years would require an estimated \$35,000,000 expenditure for major rehabilitation and new construction on the station. The disestablishment of the station command will make available urgently needed aviation operating funds during fiscal year 1959.

The land and the station facilities will be disposed of as directed by current surplus disposal policies, but that will not be the end of the Navy in Hutchinson. The Kansas town has learned a great deal about the Navy and has a far different understanding of it than the town people had in the '30s when the only Navy they saw was "Battleship Row" in the newsreels.

Hutchinson, its residents say, will always be a "Navy town."

HIGH IN THE SKY over seas of Kansas wheat fly P2V Neptunes of Adv Trng Unit 614 of NAS Hutchinson. NAS is scheduled for disestablishment in July.



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Striking Force Exercises

A series of Striking Force exercises is being conducted in the Eastern Pacific by the First Fleet. The first in this series started in early December when some 37 ships and 14,000 men sortied from San Diego and Long Beach.

These Striking Forces differ from major Pacific Fleet training exercises only in their lesser magnitude and duration.

In this particular "Strike," joint operations from the carrier *uss Hornet* (CVA 12) featured air operations while *uss Helena* (CA 75), armed with the *Regulus I* missile, held guided missile operations. Submarine and antisubmarine warfare tactics were employed with the carrier *uss Philippine Sea* (CVS 47) acting as the major unit of an anti-submarine group.

No More Rhine River Duty

The famed Rhine River Patrol, which the Navy has operated since early 1949, is being returned to the operational control of the Army. The turnover will be completed by 1 Jul 1958. In the transition, the Navy will train personnel of the German Army who will man the patrol craft.

About 350 U. S. Navymen and approximately 50 craft have been patrolling the American Sector of the Rhine River International Waterway, from Lauterburg to Lorch, Germany, a distance of 120 miles, for the past nine years. The primary mission of the patrol is to support the U. S. Seventh Army.

Landing craft of the patrol can transport 280mm artillery cannons and the *Honest John* rocket launcher. The Patrol's collateral tasks include the control of barge traffic and the protection of bridges along the waterway. The patrol, while under the Navy's command, has aided in river rescue work for civil and military groups and also helped evacuate areas of Holland during the disastrous floods in February 1953.

Transonic Fighter Trainer

Two contracts have been awarded for additional F9F-8T *Cougar* fighter trainers and WF-2 *Tracer* early warning aircraft.

The F9F-8T *Cougar*, now in service with the Navy, is a two-place transonic fighter trainer. It has been important in qualifying pilots for carrier operation and supersonic flight, as well as being ready for service as an operational fighter.

The WF-2 *Tracer* houses in its



USS SOLEY (DD 707) recently returned from a four months' tour with the Sixth Fleet which included a visit to Abadan, Iran, world's largest oil refinery.

mushroom-like radome, electronic detection equipment to provide the Fleet with information on impending attack by enemy air and sea forces. The carrier-based, all-weather aircraft can also control friendly task force defense fighters in the interception of such attacks.

Escort Squadron Down Under

Three San Diego-based escort vessels assigned to Escort Squadron Nine have completed a six-day visit to Brisbane, Australia.

The ships were *uss Lewis* (DE 535), the squadron flagship; *Ulvort M. Moore* (DE 442), and *Wiseman* (DE 667).

A number of competitive sports activities, sight-seeing tours and social events were arranged for the

visiting U.S. Navymen by their Australian hosts.

The destroyermen were given free bus transportation by the Lord Mayor of Brisbane and free rail transportation by the Governor of Queensland. A special dance was held in their honor and they were admitted free to the Koala (Native Bear) Sanctuary and Zoo, as well as to movie theatres in Brisbane.

Baseball and basketball games were played with local teams and U.S. bluejackets also entered a state amateur boxing tournament. Some of the visiting sailors even tried the British game of cricket.

In an effort to repay Brisbane's hospitality, the U.S. Navymen held open house for the citizens of the host city. Everyone had a good time.



NEW EYES FOR AMPHIBS—When day or night visibility is zero a new lightweight radar aboard amphibious control craft will help land assault troops.

Gunny Returns to U.S. Marines

The rank of Gunnery Sergeant has been ordered from retirement by the Commandant of the Marine Corps as the result of a recommendation by the 1957 Staff Noncommissioned Officers Symposium.

It is being reestablished in an effort to strengthen the command structure of the Marine Corps. Recently the historic and honored ranks of Sergeant Major and First Sergeant were also reactivated.

The rank of Gunnery Sergeant had a long and colorful career before it was retired in December 1946. It was originally established by an Act of Congress on 4 May 1898. From that time until 1935 the rank of Gunnery Sergeant was in the second pay grade or equal to the present day rank of technical sergeant. This is the primary reason for the widespread habit of addressing technical sergeants today as "Gunny."

In 1935 Master Gunnery Sergeant was added to the rank structure. This



MODERN HUNTER — USS *Bittern* (MHC 43) is the first of the wooden hull coastal mine hunter class.

rank was also abolished in the sweeping revisions of the enlisted rank structure adopted by the Marine Corps in 1946.

TEW Line for Marines

A new long-range search and height-finding radar system which promises to extend radically the nation's defense perimeters is under development for the Marine Corps.

This highly portable Tactical Early Warning (TEW) system is capable of being moved about by helicopters and is adaptable to rapidly changing tactical situations in any environment.

It's about one quarter the size and weight of conventional systems, yet is capable of detecting enemy aircraft or missiles at altitudes and distances in excess of any existing or contemplated tactical system.

By incorporating detection and height determination into one system, the new lightweight package is capable of replacing two present systems. In addition to being transported by helicopter, the TEW system can be easily and quickly moved about by amphibious vehicles, trucks and cargo-type aircraft.

Construction to Start on Navy-Marine Memorial Stadium

The Navy-Marine Corps Memorial Stadium plans moved forward several big steps at the end of the year. Contributions passed over one million dollars. Then, as a result of Navy participation in the Cotton Bowl, another \$100,000 was put into the fund. This, together with the one million dollars saved up through the years by the Naval Academy Athletic Association, leaves about \$1,000,000 to be raised by July 1959.

And that isn't all. During the Cotton Bowl period (Navy won over Rice Institute 20 to 7, in case

you haven't heard), RADM W. R. Smedberg, III, usn, Superintendent of the Naval Academy, had a luncheon meeting with a group of Texas bankers. The luncheon was a success—the Texans agreed to a loan of up to \$500,000 at a moderate rate of interest if additional money is needed to meet contract requirements for the stadium. Admiral Smedberg announced that the bankers, as their contribution, had waived the usual \$10,000 fee required to confirm such a prospective loan.

Bids are now out and contracts

will be let by 1 March. The contract will be for the entire stadium as planned.

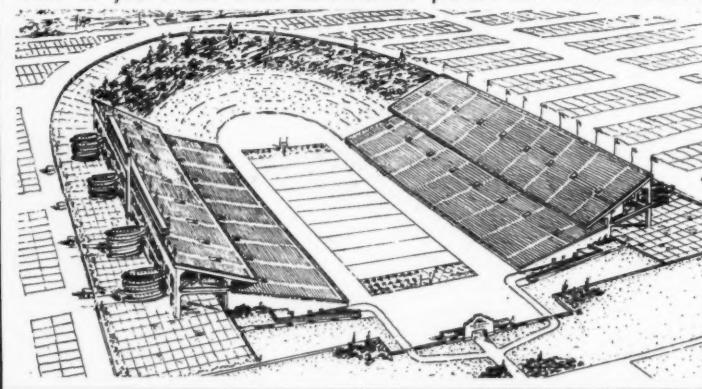
The Sixth and Seventh Fleets have been offered Memorial Gates to represent all type commands overseas. Gates will be reserved until 15 Apr 1958. All funds raised in these two Fleets since 2 Dec 1957 will count toward the \$15,000 needed for a gate.

Naval Districts and Marine shore activities are now getting into full swing in their drives for the fund. Movie premieres are being planned in various cities; many stations are planning spring carnivals, and several unique money raising ideas are being used.

Memorial chairs may be dedicated to anyone who has ever served in the Navy or Marine Corps, living or dead, Reserve or Regular. Some servicemen are helping spark the drive by getting the word to former Marines and Navymen through newspapers, radio, TV—and word of mouth.

The plans for naming the chairs which seem to be most popular are: (1) Name of the individual for whom a ship is named; (2) Name of a shipmate lost in action or an operational casualty; and (3) Name of the individual contributing.

GOAL NEARER—Navy-Marine Corps Memorial Stadium plans got big boost at year's end when contributions passed one million dollars.

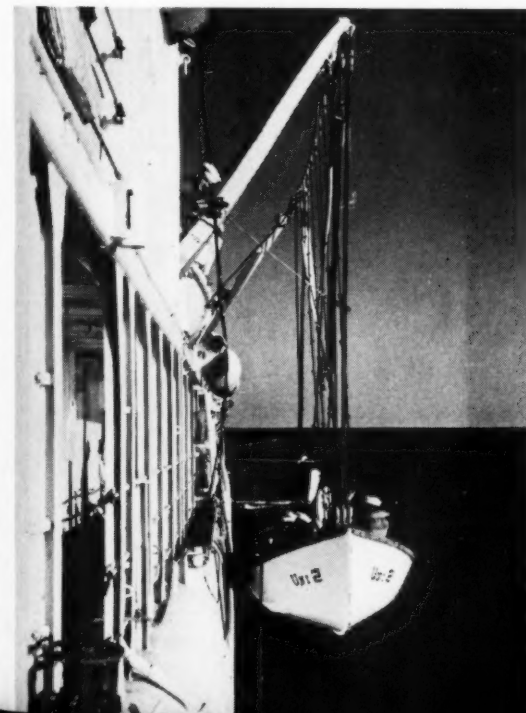




Coast Guard Seamanship

IN THE COAST GUARD as well as the Navy, small boats play an important part in the safety of the ship and crew. In addition, Coast Guardsmen patrolling offshore or in our harbors must be ready to lower away these small craft on a moment's notice to answer a cry for help. Boat drills such as these held aboard the Coast Guard training ship usCGC *Unimak* (WAVP 379) operating out of Cape May, N. J., keep all hands shipshape in small-boat handling.

Top: Coast Guard trainees hold lifelines waiting for the command that will lower them to the sea. *Below:* 'Lower away' and the boat crew is on its way. *Lower right:* Boat #2 hits the water with a splash. *Above right:* Messenger line is heaved to small boat as it pulls alongside the cutter.





HOOPING IT UP — It's time again when Navy hoopsters steal the sport's picture while shooting for the rim on ship or station hoping for All-Navy honors.

All-Navy Photo Winners

Our nuclear navymen are tops no matter how you judge them. In the recent All-Navy Photo Contest, John J. Krawczyk, FTCA, USN, one of the few remaining original crew members aboard our first atomic submarine, was awarded first prize in the black and white Novice (Amateur) single picture class.

The prize winning entry submitted by the *Nautilus* chief—"Fiesta Bound"—was taken near Cuernavaca, Mexico. It pictured a group of Mexicans walking to a fiesta on the other side of the mountains which were beautifully shown in the background of the picture. According to Chief Krawczyk, small groups

of Mexicans walk anywhere from 60 to 70 miles to go to one of these fiestas. While "Fiesta Bound," they carry with them all the provisions they need for the two-three day journey.

In addition to winning first prize, Krawczyk also received three honorable mentions. He submitted a total of 12 entries to the All-Navy Contest.

The nuclear submariner was also awarded second prize in the Seventh Inter-Service Photo Contest where the winning entries in the Navy contest were matched against the best pictures of the Army, Air Force, Marine Corps and Coast Guard.

Krawczyk's winning picture in the

Inter-Service Contest had received an honorable mention in the All-Navy judging. Entitled "Four Feet in Error," it was an action shot of a bronco named "Lightning," that was more than living up to his name during a rodeo in Phoenix, Ariz.

The finals for the All-Navy Photo Contest were held at the Museum of Modern Art in New York City. The judging was done by a board of eminent professionals consisting of: CAPT Edward Steichen, USNR (Ret.), Chairman and Director, Department of Photography, Museum of Modern Art; Mr. Jacob Deschin, Photography Editor, *New York Times*; Mr. Ed. Hannigan, Editor, *U. S. Camera* magazine; and Mr. Ray Mackland, Picture Editor, *Life* magazine.

Here are the winners in each class and category of the All-Navy Photo Contest:

BLACK AND WHITE — NOVICE

First "Fiesta Bound"

John J. Krawczyk, FTCA (SS), USN
USS *Nautilus*, SS(N) 571

Second "Legends of the Great Buddha"

LTJG Robert I. Gomel, USNR
NAAS Pt. Isabel, Texas

Third "Bridge to Eternity"

LT Holmes S. Norville, USNR
Staff, Com12

Honorable Mention

"Return of the Fishing Boats"

LTJG Robert I. Gomel, USNR
"Sea Foam"

T. "J" Gabris, SCLK, USCG
Staff, Third Coast Guard District,
N. Y., N. Y.

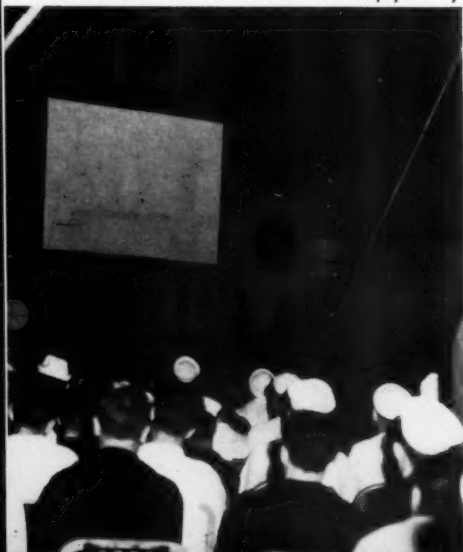
"Pourquoi Pas"

John J. Krawczyk, FTCA (SS), USN
"Which Way Is Up"

John J. Krawczyk, FTCA (SS), USN
"Four Feet In Error"

John J. Krawczyk, FTCA (SS), USN

TIME FOR FUN — Movies are enjoyed by white hats and (right) a very good time is had during open house.



ALL HANDS

35 mm COLOR TRANSPARENCIES — NOVICE

First "Birth of an Ambition"

John M. Anglin, PNC, (SS) USN
U. S. Navy Recruiting Station,
Dallas, Texas

Second "Candle Light"

CAPT Edward Fredericks, USN
CO, NATTC, NAS Memphis, Tenn.

Third "Hong Kong Night"

LT John J. Berend, USN
USN Postgraduate School,
Monterey, Calif.

Honorable Mention

"Spider at Dinner"

CDR Jack L. Kenner, USN
BuPers, Washington, D. C.

"Cross of Ages"

CAPT Edward Fredericks, USN

"Natural Duck Blind"

LT Ronald G. Granger, USN
NavSta Kodiak, Alaska

"Dusk on the Mountain"

LTJG Robert H. Aslakson, USN
NAS Moffet Field, Calif.

"Hometown, USA"

Walter T. Bregler, AN, USN
NAS, Willow Grove, Pa.

BLACK AND WHITE — EXPERIENCED

First "November"

CDR Edward C. Scully, USN
Comptroller Division, BuPers

Second "Moonlight on the Weser"

Gordon C. Sahnov Jr., CT3, USN
NSCAA, Navy 913

Third "Over the Numbers"

Robert J. Costello, PH1, USN
NRTU, NAS Memphis, Tenn.

Honorable Mention

"On the Bank of the Canal"

CDR Edward C. Scully, USN
"Lonesome"

Leroy R. Newburn, PH3, USCG

USCG, US Custom House, N.Y., N.Y.

"Hawaiian Hat"

CDR Edward C. Scully, USN

BLACK AND WHITE PICTURE STORY — EXPERIENCED

First "Halloween Ball"

Leroy R. Newburn, PH3, USCG

Second "Canal Clipper Cruise"

CDR Edward G. Scully, USN

35 mm COLOR TRANSPARENCIES — EXPERIENCED

First "Waiamea Falls"

CDR Edward C. Scully, USN

Second "Sea Green"

CDR Edward C. Scully, USN

Third "Blumen"

Eugene Kirby, CT1, USN
NSGA, Navy 913

Honorable Mention

"Aloha"

CDR Edward C. Scully, USN

"Standing Room Only"

CDR Edward C. Scully, USN

There were no winners in black and white story division, in the novice class.

SIDELINE STRATEGY

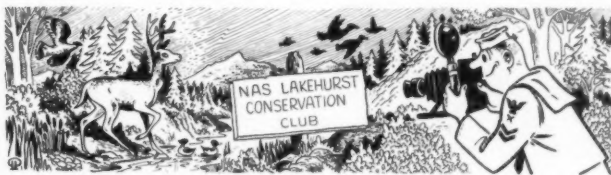
CONSERVATION minded Navy-men at NAS Lakehurst, N. J. can be mighty proud of their weekend accomplishments during the past three years. Some 40 members of the Lakehurst Conservation Club—which was founded as a means of extending the existing recreational facilities at the LTA base—have more than blistered fingers and calloused hands to show for their 1500-man hours spent at work in the field.

Before the club was organized in September 1954, the sandy soil at the gigantic airstrip base didn't provide enough vegetation to feed

ated, by, of all people, the station's chaplain.

Although the club members have devoted a lot of sweat and toil to their project, they do not claim all the credit. Its success has not been the guesswork of amateurs. Technical guidance and material assistance have been received from many civilian and government activities, including the U. S. Wildlife Service, the New Jersey State Fish and Game Commission and Rutgers University.

To make their project complete, much to the satisfaction of Lakehurst fishing enthusiasts, two small fish ponds were



more than one deer for every 40 acres. There was only one known covey of quail in the whole 7300 acres and upland game and migratory water fowl were rarely seen.

Today it's a different story. Through restocking a small number of breeder bobwhites, the single covey has multiplied eightfold; a mere 115 acres of food plot have brought about a concentration of more than 200 deer; squirrels, rabbits and other wildlife now abound, and waterfowl have found a new breeding-feeding haven.

Club members have given freely their off-duty time, energy, ability and even personal finances to make their conservation program a success. Not a single penny of the more than \$5500 spent to date has come out of appropriated funds. The only government material used was the services of heavy equipment, such as a bulldozer, which was oper-

dug out and stocked with bass and bluegills.

Meanwhile, out Pearl Harbor way, the sports minded submariners are singing an ole familiar tune, "Who Could Ask For Anything More?" They boast of having one of the island's finest recreation boats, which is rigged for deep-sea fishing; the recently renovated Millican Field is now rated as one of the Navy's most beautiful stadiums; the enlisted men's tennis courts have taken on a new look with their recently added windbreakers and resurfaced decks; a newly re-soiled and reseeded Gabrunas Field will soon meet the satisfaction of the many station personnel who participate in intramural softball and touch football; a second swimming pool is under construction; and another fishing boat is in the buildingways. Wow! SubPac, here we come.—HGB, JOC.

SERVICESCOPE

Brief news items about other branches of the armed services.

★ ★ ★
FUNDS FOR THE CONSTRUCTION of four launching sites for the *Bomarc* missile, a long range surface-to-air interceptor weapon, have been released by the Air Force.

The sites will include launching and storage facilities, missile operating and maintenance equipment, control and protection facilities and supporting utilities. They will be located at McGuire Air Force Base, N. J.; Otis Air Force Base, Mass.; Suffolk County Air Force Base, Long Island, N. Y., and Dow Air Force Base in Maine.

The *Bomarc* missile is to be integrated into the Air Defense System of the United States. Successfully tested at Patrick Air Force Base, the supersonic weapon can seek out and destroy enemy aircraft at great distances from its launching site.

★ ★ ★
A UNIQUE RESEARCH AIRPLANE, designated the "Verti-plane," designed to take off and land vertically, hover and fly forward, has been designed and built for the Army under the technical direction of the Office of Naval Research.

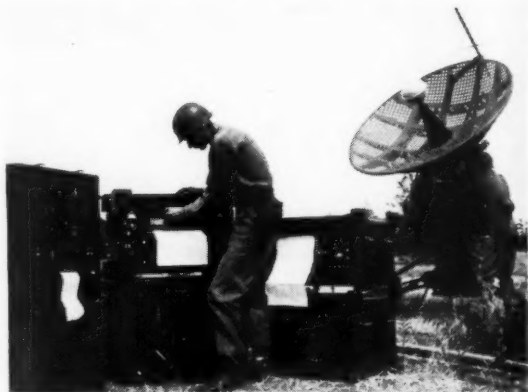
Unlike the "tail-sitter" type of VTOL aircraft, such as the Vertijet, the Vertiplane is a "level-lift" airplane. On the ground, it assumes a nose-high attitude because of its extended landing gear. In all phases of flight, including take-off, landing and both vertical and horizontal flight, the plane operates in the conventional, horizontal attitude.

Conventional in appearance, the Vertiplane is a true VTOL aircraft, taking off and landing without any ground run. It employs the "deflected slipstream" principle. It has two large propellers, powered by a gas turbine engine located within the fuselage, and double retractable wing flaps which extend far below the wing trailing edge. When extended, these flaps bend the propeller slipstream downward, providing vertical lift for take-off, hovering and landing. For transition into horizontal flight, the flaps are retracted as the plane picks up speed and the slipstream then flows horizontally.

The Vertiplane has been developed in response to a



A REAL GASSER—Family portrait of TAC's composite strike force has tanker, fighter, bomber, supply aircraft.



SIGNAL CORPS' new all-weather radar 'eye' is able to spot one man half a mile away in darkness or fog.

need by the Army for a medium-speed liaison, reconnaissance or utility plane which can operate from rough terrain without runways. Using its propeller-wing combination for lift in vertical take-off and vertical descent and its wing for lift in horizontal flight, the Vertiplane possesses the advantages of the helicopter yet will far exceed rotary-wing aircraft in speed and range capability.

The Vertiplane is flown with conventional stick and rudder pedals. In addition to the usual flight controls, special provisions have been made to insure adequate control during hovering flight. In landing, the pilot makes an approach with power on and some flap deflection. Then, he extends the flaps and adds power until touchdown is made at zero forward speed. Drag from the flaps helps to accomplish a smooth landing transition at almost constant altitude.

An unusual feature of the Vertiplane is the end plates at both extremities of the wing. These provide structural support for the large flaps and confine the propeller slipstream to the flap span for better flight efficiency.

The Vertiplane is 27 feet, 8 inches long; 10 feet, 8 inches high and has a wing span of 23 feet, 5 inches. The plane is designed to accommodate two people and to have a gross weight of approximately 2600 pounds.

★ ★ ★
AERIAL DELIVERY of nuclear weapons from low altitudes, once a precise and critical task, is now a standard operation for Air Force fighter-bomber pilots.

The technique is made feasible by a combination of an automatic flight control system with a LABS (Low Altitude Bombing System) computer.

Before linking the automatic flight control system to the LABS computer, a pilot man-handled his airplane through an Immelmann maneuver that tossed the bomb, righted the plane from its upside-down position at the top of the loop and ducked away from the bomb blast.

With the new system, a timer button is pressed several seconds before the aircraft begins the Immelmann turn and the auto-pilot unit controls the flight of the plane. When the timer phase is completed, the plane begins its turn, holding a pre-determined heading

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and turn. The LABS computer releases the bomb at the proper instant, and the automatic pilot continues to fly the plane through the Immelmann turn, righting it and sending it away from the bomb blast.

Pilots who have flown practice missions with the new equipment have found the automatic pilot to be superior to the manual method.

LABS was based upon the belief that a plane flying at a very low altitude would be able to escape detection before reaching its target. Then the plane could release its bomb while making an upward loop, lobbing it far enough to allow the pilot to escape the blast area.

With a low-angle release, the bomb is lobbed ahead of the plane, which can then fly away from the target area. For a high-angle release, the plane starts its turn over the target and releases the bomb near the peak of its upward turn. While the bomb is traveling upward, the plane passes under it and is out of danger by the time the bomb loops down on the target. This method is termed the "over-the-shoulder" delivery, while the low-angle release is called the "lofting" or "lobbing" technique.

★ ★ ★

A PORTABLE NEUTRALIZING SHOWER STALL, with a water tank heated by highway flares, is now in quantity production for the Army. It will be used primarily at tactical guided missile sites by personnel who are accidentally contaminated with liquid rocket propellants.

Mounted on skids, the unit has a 100-gallon water tank, pressurized by compressed air, or nitrogen, from standard gas shipping cylinders. Since most of its construction is of aluminum, it weighs only 570 pounds. It is three feet wide, four-and-a-half feet long and seven-and-a-half feet high. When not in use it can be folded.

The water tank of the unit is so well insulated that just four truck flares or highway torches will keep the water at body temperature when outdoor temperature sinks as low as 25 degrees below zero. To protect the user from being scalded by overheated water, the tank has a drain plug that melts out and cuts off the water when the temperature reaches 135 degrees. Normally, however, the water is kept from overheating by regulating the number of torches burning. If torches cannot be used, the water can be heated electrically.

The unit was developed at the Corps of Engineers' Research and Development Laboratories, Fort Belvoir, Va.

★ ★ ★

A NEW PITOT-STATIC TUBE, for more accurate measurement of supersonic aircraft speeds, has been developed for the Air Force. It can be used effectively at speeds up to Mach 3—three times the speed of sound—(at sea level one Mach equals 762 miles per hour).

Mounted on a plane's nose or wing-tip, the tube transmits air pressure data to flight instruments on the pilot's instrument panel and air data computers. This information indicates airspeed, Mach number, altitude and rate-of-climb.

Before the new tube was developed, aircraft were equipped with pitot tubes which lagged in transmitting information at supersonic speeds. The new tube, longer and narrower than the present ones, and with a knife-



LIFT ME TENDER—Army's H-34 helicopter demonstrates its unlimited versatility as an L-19 is gently hoisted aloft.

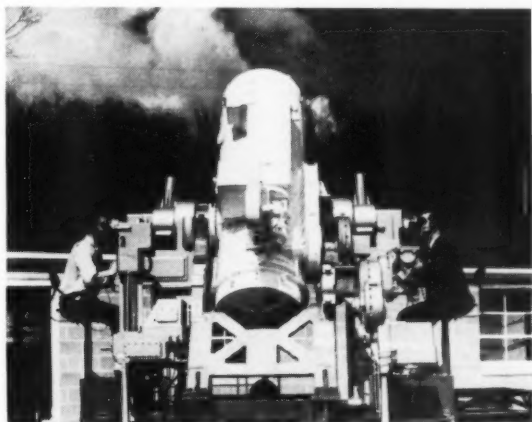
edge opening instead of a blunt-edged one, has a larger static chamber and larger lead-out lines to reduce this lag.

The device is vibration-resistant, and able to withstand extreme variations of temperature. To provide the proper heat under icing conditions, it is equipped with an electric heater which regulates itself automatically.

★ ★ ★

A MISSILE MASTER SCHOOL is being set up at Orlando, Fla., to train the soldiers who will man the Army Air Defense Command's system of firepower coordination for guided missile batteries. The new school replaces a temporary one which was started in October at Ft. Meade, Md., to train the nucleus of a Missile Master team for service in the Washington, D. C.-Baltimore, Md., area.

A complete, semiautomatic system, the Missile Master is being installed in key defense areas as rapidly as equipment and trained operators become available. It is used to coordinate all Army anti-aircraft weapons, including the Nike-Ajax, Nike-Hercules and Hawk missiles.



PEEP SHOW—Air Force's recording optical tracking instrument takes pictures of ballistic missiles in early flight.

THE BULLETIN BOARD

You've Got a Lot to Like in Norfolk — This Is Reason Why

HAD DUTY IN NORFOLK YET? If not, you probably will. Plenty of Navymen pull a tour of Norfolk duty. Some say it's because of their sins; others claim such an assignment is the reward for a long life of virtue.

No matter what your viewpoint, you'll find more Navy people living in and around Norfolk than any other place in the world—including the Pentagon and Main Navy.

This very fact makes it different from any other place you've ever been stationed. It means that the whole city of Norfolk is actually one huge naval station. Everywhere you go, you'll find Navymen and their families—on the buses, in the schools, stores, offices and churches. Here—at the crossroads of the Navy—you're more likely to meet former shipmates than any other place, including Times Square.

In The Norfolk Area

That garden spot of the Western Hemisphere generally known to the Fleet as "Norfolk" is really Hampton Roads, an area of the James River and Chesapeake Bay which includes Norfolk, Portsmouth, Newport News, Hampton, Warwick and South Norfolk, Va. If you are assigned to the "Norfolk area" for sea or shore duty, you will be serving in one of these areas. Nearby activities are located in Little Creek, Yorktown, Dam Neck, Oceana, Northwest, and Driver, Va., among others.

Naval Shipyard

No matter how you refer to it, "Norfolk" is quite a spot. Here's a brief description of its activities. It may help you find your way around:

The first drydock in the Western Hemisphere was constructed at the Norfolk Naval Shipyard, Portsmouth, in 1826. Built of Massachusetts granite, the dock narrowly escaped being dynamited in 1862 and is still used every day, although six more drydocks and two shipbuilding ways have been added. The yard is at present valued at more than \$185,000,000. This includes the ship ways,



"Find out if he ever heard of semaphore"

docks, 44 miles of railroad track, nine locomotives, 254 railroad cars, and 394 cranes and derricks. Stores and equipment would add an estimated \$200,000,000 to the yard's value. Within sight of the shipyard is the Portsmouth Naval Hospital, the nation's oldest military hospital. Opened in 1830, the original high pillared building, with many additions, is still in use. It is equipped to care for 2150 military personnel and their dependents at one time, and affords every type of modern medical care.

Naval Base

In comparison with the historic Portsmouth activities, the Naval Base on the Norfolk side of the Elizabeth River is relatively new. Commissioned as recently as 1917, it now has eight sub-commands in the Seawall Point Area.

The Fifth Naval District has its headquarters here at the Naval Base, which is the major activity, the focal point, of the district.

From its original 474 acres the base expanded to more than 4000 acres, largely by land reclamation. Naval engineers, in deepening the ship channels and berths, took land from the sea and swamp.

Storage and administration buildings and 8000-foot criss-cross runways now stand on man-made land. The Naval Base piers are capable of handling the largest ships in the

world. This is the home of the U. S. Atlantic Fleet, and if the whole Fleet had to come in here, the deep water harbor could contain it all.

Naval Supply Center

Handy to the Naval Base piers is the U. S. Naval Supply Center, the largest single supply activity in the Western Hemisphere. Here are stored enough materials to keep the U. S. Atlantic Fleet equipped and supplied for months ahead of its immediate needs.

The Supply Center requires 85 buildings, one of which is said to be the largest building south of the Pentagon. Here can be found everything from paper clips to 20-ton ship's anchors. At present, the yearly issue to the Fleet in the Atlantic, Caribbean and Mediterranean is valued at about 200 million dollars, exceeding even the largest mail order houses.

The Center, including several annexes away from the Naval Base proper, covers nearly 4000 acres of land. It has more than half a billion dollars worth of material requiring millions of square feet of storage space. Several separate depots are used for ship supply, aviation supply, ordnance, special weapons, etc.

Naval Station

On the Naval Base is located the Naval Station, where approximately 100,000 sailors are processed annually as they go to sea or return to shore duty. As these men await their ships or transportation to shore billets, they must be housed and fed. The Naval Station keeps eight barracks in operation and a mess hall with four units where thousands of men can eat at mealtime.

Another component of the Norfolk Naval Station is the Naval Schools Command. Nine schools make up this command, with a student population of more than two thousand. An average of 860 men graduate monthly, trained and ready to assume technical shipboard duties.

Naval Air Station

Next to the U. S. Naval Base is

the U. S. Naval Air Station, home of the U. S. Atlantic Fleet air force and cradle of naval aviation.

The U. S. Naval Air Station was commissioned in 1918 and has since developed a cluster of auxiliary fields to become the greatest naval aviation establishment in the world. Its squadrons of jets, bombers, transports, patrol and torpedo planes, operating with the Fleet, represent an effective arm of defense, particularly in antisubmarine warfare.

The Overhaul and Repair Department does over one hundred million dollars worth of instrument, engine and airframe repair work annually.

The operations control tower clears a monthly average of 13,000 planes for take-offs and landings from one field alone, approximately one landing or take-off every three minutes.

Recently expanded from an auxiliary status is the Oceana Naval Air Station, now a master jet base, located at Oceana, near Virginia Beach, Va. It is considered home for the Navy jet squadrons when they are not operating from carriers in the Fleet.

NATO and SACLant

Not only is there a concentration of U. S. Navy flag commands in the area (there are 23 of them), but here also is the headquarters of SACLant, the North Atlantic Treaty Organization's seagoing command.

Many foreign ships also put in here for training under the Mutual Defense Assistance Program.

The large Amphibious Fleet Training Command is located at Little Creek, eight miles from the Naval Base.

Among other important installations in the Norfolk area are the Mine Warfare School and Mine Depot at Yorktown, Va.

Living in Norfolk

So much for the naval aspect of Norfolk. Perhaps you'll be stationed at one of the installations described above. If so, this is what you can expect to find:

If you're single, you won't like the dating situation. It's pretty difficult to meet girls here for the simple reason that there just aren't enough to go around. To Norfolk's civilian population, add some 20,000 or more sailors, and the men just automatically outnumber the women by a big majority—and this is one situ-

ation in which the minority rules. Even so, some Navymen do meet Norfolk girls, and many Norfolk girls become Navy brides.

Dependents Information Center—

If you're married, you or your wife should, by all means, stop in at the Center, located in Building E-24, just inside Gate 2 (which is the main gate) of the Naval Base. It should be the first stop for all married Navymen and their dependents. Its services include housing information, the issuance of dependents' ID cards, maps, notary public service, and general orientation.

Climate—The climate of Norfolk is relatively mild in winter. Snow may fall two or three times during a winter, but it seldom lasts more than a few hours.

In summer, the temperature climbs into the 90s all too frequently, but usually ocean breezes in the evening make it bearable. The humidity makes it pretty rough at

times. Let's face it—it gets hot and sticky in the summer.

All in all, Norfolk's climate is similar to such cities as San Diego, Buenos Aires, Montevideo, Sydney and Rome.

Churches—There are some 371 churches in the Norfolk-Portsmouth area. In almost every one, numerous Navy families are counted as active members.

These churches are listed on the second page of the yellow section in the Norfolk telephone directory. Find the church of your choice near where you'll be located, and you can count on being welcomed. Those church socials and chicken dinners are just like the ones back in your home town.

Schools—Schools in the Norfolk area, like those in almost every section of the country, are still crowded. Between five and 10 per cent of the class rooms here have "split shifts" so that all can be accommodated.

WHAT'S IN A NAME

FASRon on Ice

For the benefit of all hands, FASRon 107, based ashore at Keflavik, Iceland, would like to clarify what is, and what isn't, in its name. From their North Atlantic perch they offer these observations:

The addresses on mail sent to them are a cause of concern, not to mention confusion, in the transport of their mail.

For example, they are not a ship designated as USS FASRon 107. Nor are they accustomed to having aircraft operate in their immediate cove area as might be the case if they happened to be called a Naval Air Facility. But correspondence addressed to personnel in the unit calls them both a ship and a station, as well as other choice titles.

The record shows that they are quick in the support of their squadron whether it be in the field of logistics or blood donations. However, they do not feel that the name Fast Attack Squadron 107 is applicable.

What's more, one might think being in Iceland is special, but that doesn't mean the "S" in their name stands for Special.

These, says FASRon 107, are just a few of the many types of names they find in their mail.

Their title really is Fleet Aircraft Service Squadron 107, and this particular outfit can be reached c/o Fleet Post Office, New York, N. Y.

What is a FASRon?—it's a unit which



maintains and repairs fleet aircraft. A more detailed explanation is this one:

"A mobile unit of the naval operating forces, composed of a nucleus augmented by additional units of personnel necessary to carry out the mission assigned by the force commander; a FASRon is the coordinating agency in the logistic support of fleet aircraft units, except in matters of berthing, messing, and housekeeping; it performs all specialized shop work as distinguished from routine maintenance, and may operate its own aircraft necessary for support of the fleet."

THE BULLETIN BOARD

However, school officials are taking big steps to meet the growing demand. In the period from 1950-60, Norfolk City alone will have spent 25 million dollars on new schools.

Not only are Norfolk educators working hard to provide enough buildings; they are also striving to maintain teaching standards as high as possible. Schools here are regionally and nationally accredited.

One very important reason why the schools here are of such high caliber is the large number of Navy wives who teach in Norfolk schools. As a matter of fact, it simply wouldn't be possible to fill all the teaching billets if it weren't for the Navy wives. School administrators are enthusiastic about having them on their staffs, too. They point out that the Navy wives—coming as they do from such broad sections of the country—bring to the classrooms a much broader view. So your Navy wife with teaching experience will find a hearty welcome here if she wishes to continue her profession.

If you are interested in working in some college credits during your tour of duty here, you should plan to visit the Norfolk Division of the College of William and Mary. This school offers a two-year college course in a wide variety of subjects.

To obtain more detailed information about schools in the Norfolk area, write to one of the following:

Supt. of Norfolk Schools
Bank and Charlotte
Phone MADison 5-7491

Supt. of Norfolk County Schools
148 Granby Street
Phone MADison 5-5301

Supt. of South Norfolk Schools
3815 Bainbridge Blvd.
Phone KImball 5-1511

Supt. of Portsmouth Schools
Municipal Annex
Portsmouth, Va.
Phone EXport 7-0721

Supt. of Princess Anne Schools
Princess Anne Court House
Princess Anne, Va.
Phone Princess Anne 411

Catholic Schools
Catholic Information Center
608 McKevitt Bldg.
Norfolk 10, Va.
Phone MADison 2-4480

Transportation—There are six railroads, three air lines and two bus lines offering passenger service to and from the Norfolk area.

The main highways leading in and out of Norfolk are:

U. S. 58—Enters from Portsmouth via ferry.

U. S. 460-A—Enters from Portsmouth via tunnel.

U. S. 60—Enters via Newport News-Norfolk Tunnel (replacing the old ferry route.)

State Highway 168—Enters via Newport News-Norfolk Tunnel (replacing the old ferry route.)

U. S. 13—Across Chesapeake Bay by Kiptopeke-Little Creek ferry, entering at Little Creek Naval Amphibious Base, later forming a part of Military Bypass around the city.

State Highway 170—Through South Norfolk, connecting with U. S. 460 in Campostella section.

U. S. 460—Merges with U. S. 58 at Suffolk, later with U. S. 13 bypass.

U. S. 17—Enters from Portsmouth on north. Major north-south highway.

Housing—There is an ample supply of housing in the Norfolk area—whether you want to buy or rent.

Builders in the past few years have spent literally millions of dollars in constructing apartment projects and individual homes in and around Norfolk. There has been a tremendous growth in the suburbs to the east and south—toward the Municipal Airport, Little Creek and Virginia Beach.

Real estate prices here are about on a par with other metropolitan areas. They're possibly a little higher than, say, Kansas City or St. Louis, but lower than in Chicago, New York

and especially Washington, D. C.

Whether you buy or rent, a member of the Norfolk-Portsmouth Real Estate Board can give you reliable advice.

Two agencies keep listings which may be of help in finding a home:

The Housing Office, Fifth Naval District,
Norfolk, Va. Phone MADison 2-8211,
Extension 3285

Travelers Aid Society, 714 Boush St.,
Norfolk, Va. Phone MADison 7-5635

Recreation — Servicemen's Clubs.
The Servicemen's Club is located at 219 Boush Street, diagonally across from the Navy YMCA. It's a popular gathering point and base of operations for Norfolk Navymen. Sponsored on a nonprofit basis by the city's leading citizens, the Club offers a bar lounge and liquor lockers. On Tuesday and Friday evenings orchestras are furnished for dances.

Clothes lockers, dressing rooms and showers are available on a 24-hour basis. The minimum membership fee is \$1.50 per month.

A complete calendar of weekly social activities at downtown Y's, USO clubs and the City Recreation Center is published weekly by the Fifth Naval District Special Services.

• **Bowling**—There are six bowling centers in Norfolk with a total of more than 100 alleys. They're located at 257 Boush Street; 2208 Colonial Avenue; 5034 Chesapeake Boulevard; 157 W. Ocean View Avenue; 7659 Granby Street; and 9th and Granby Streets.

• **Wrestling**—One of the most popular of indoor sports in Norfolk is big-time wrestling. Matches are held each Thursday night at 8:30 in the Norfolk Auditorium located at 9th and Granby. The auditorium seats 3669, and they pack 'em in.

• **Baseball**—You Navymen who like baseball will enjoy watching the Norfolk Tars play at Myers Field, 20th and Church Streets. The Tars, backed by the New York Yankees, play in the Class B Piedmont League, along with Portsmouth, York (Pa.), Hagerstown (Md.), Colonial Heights (Petersburg), Newport News, Lynchburg, and Lancaster (Pa.). The Tars have been champs for about five successive years. The Big Leagues are loaded with ex-Tars.

• **Fishing**—Chesapeake Bay is



popular for Ocean View spots, salmon, trout, croakers, flounder and many other varieties of fish. You can rent boats at Lynnhaven Inlet and Ocean View.

Surf fishing from the shore, pier and bridge fishing and fresh water fishing at Lake Smith are popular pursuits here, too.

• **Golf**—You can play golf the year 'round at several good 18-hole courses:

Ocean View Course, in Ocean View off Granby Street (not far from Breezy Point Gate of NAS). Semi-private.

Kempsville Meadows Golf and Country Club, 9 miles from Norfolk. (Also semi-private.)

Stumpy Lake Course. Municipally operated.

Sewells Point Club, operated by the Navy, next to Camp Allen.

Naval Base Course (9 holes), operated by the Naval Station, between Dillingham Blvd., and the sea wall.

• **Beaches**—While you're stationed in the Norfolk area, you'll be near one of the best ocean beaches in the country—Virginia Beach. The beach has five miles of clean, white sand and a 2½-mile concrete boardwalk. In addition to the ocean, the resort offers dances, an amusement center, golf courses and picnic areas.

There's another excellent beach on Chesapeake Bay at Ocean View. This resort also has picnic areas and a large amusement park.

Seashore State Park, operated by the State of Virginia, has a long stretch of beach and large picnic areas with shelters.

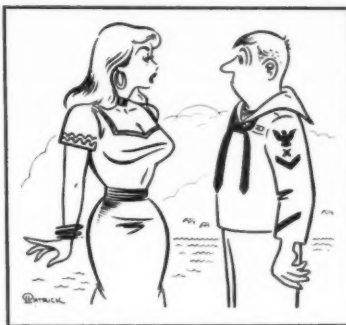
Cottages may be rented by the week at reasonable rates, but they are so popular that reservations are usually made several months in advance.

• **Movies and the Stage**—Besides the many movie houses on naval stations, there are scores of them all over town—and surrounding suburbs.

There are two legitimate stage groups in Norfolk—the Norfolk Little Theater and the Theater Guild. Both groups are anxious to have naval personnel for both on- and off-stage work.

If you have musical talent, you may want to join the Norfolk Symphony Orchestra or chorus.

There's Norfolk, have a good tou:



"Why put a ship in mothballs? Moths can't eat metal!"

Latest List of Movies Ready for Distribution To Ships and Bases Overseas

The latest list of 16-mm. feature movies available from the Navy Motion Picture Service, Bldg. 311, Naval Base, Brooklyn 1, N. Y., is published here for the convenience of ships and overseas bases. The title of each picture is followed by the program number.

Those in color are designated by (C) and those in wide-screen processes by (WS). Distribution began in December.

These films are leased from the movie industry and distributed free to ships and most overseas activities under the Fleet Motion Picture Plan.

Fire Down Below (954) (C) (WS): Drama; Rita Hayworth, Robert Mitchum.

Quantz (955) (C) (WS): Western; Fred MacMurray, Dorothy Malone.

The Disembodied (956): Horror; Paul Burke, Allison Hayes.

X-Unknown (957): Mystery; Dean Jagger, Edward Chapman.

Loving You (958) (C): Musical; Elvis Presley, Lizbeth Scott.

House of Numbers (959) (WS): Drama; Jack Palance, Harold J. Stone.

Let's Be Happy (960) (C) (WS): Musical; Vera Ellen, Tony Martin.

Death in Small Doses (961): Drama; Peter Graves, Mala Powers.

Shiralee (962): Drama; Peter Finch, Elizabeth Sellers.

The Brothers Rico (963): Drama; Richard Conte, Dianne Foster.

Sea Wife (964) (C) (WS):

Drama; Joan Collins, Richard Burton.

Forty Guns (965) (WS): Drama; Barbara Stanwyck, Barry Sullivan.

Outlaw's Son (966): Western; Dane Clark, Ben Cooper.

Portland Expose (967): Drama; Edward Binns, Virginia Gregg.

Operation Madball (968): Comedy; Jack Lemmon, Kathryn Grant.

The Living Idol (969) (C) (WS): Drama; Steve Forrest, Lili-ane Montevecchi.

Black Patch (970): Drama; Geo. Montgomery, Dianne Brewster.

Bop Girl Goes Calypso (971): Musical; Judy Tyler, Bobby Troup.

Johnny Trouble (972): Drama; Ethel Barrymore, Cecil Kellaway.

The Devil's Hairpin (973) (C): Drama; Cornel Wilde, Jean Wallace.

Three Faces of Eve (974) (WS): Drama; David Wayne, Joanne Woodward.

The Weapon (975): Drama; Steve Cochran, Elizabeth Scott.

Trooper Hook (976): Adventure; Joel McCrea, Barbara Stanwyck.

Story of Esther Costello (977): Drama; Joan Crawford, Rossano Brazzi.

Hear Me Good (978): Comedy; Hal March, Merry Anders.

WO Appointments Issued for First Class POs and Chiefs

Eleven first class and 62 chief petty officers have been issued temporary appointments to Warrant Officer, W-1.

These appointments are from an eligibility list established by the 5 Feb 1957 selection board.

Regular Navy appointments were broken down into the following designators: Aviation Operations Technician (7112), one; Boatswain (7132), 12; Surface Ordnance Technician (7232), nine; Ordnance Control Technician (7242), one; Aviation Maintenance Technician (7412), one; Machinist (7432), four; Electrician (7542), one; Aviation Electronic Technician (7612), 12; Electronics Technician (7662), seven; Ship Repair Technician (7742), one; Ship's Clerk (7822), four; Supply Clerk (7982), seven; Medical Service Warrant (8172), three; Photographer (8312), three; Civil Engineer Corps (8492), five; Communication Technician (7642), one; Aerographer (8212), one.

TABLE I
NUMBER WHO PASSED AND ADVANCEMENT QUOTAS FOR
EACH RATE AS RESULT OF AUGUST 1957 EXAMINATIONS

RATING	No. who passed	No. who may advance	No. who passed	No. who may advance	No. who passed	No. who may advance
	To E-4		To E-5		To E-6	
BM	2226	89	1353	40	1464	44
QM	287	287	158	158	90	90
SM	316	316	199	199	87	87
RD	617	617	561	561	172	172
SO	251	251	316	316	149	149
TM	194	194	216	216	159	18
GM	1420	260	988	135	709	21
GS	27	27	43	43	29	29
FT	—	—	617	400	229	46
FTG	5	2	—	—	—	—
FTM	233	118	—	—	—	—
FTU	6	3	—	—	—	—
FTA	302	153	—	—	—	—
FTL	35	35	—	—	—	—
FTE	17	10	—	—	—	—
MN	127	4	119	12	51	2
ET	515	515	680	680	253	253
IM	38	14	33	5	13	3
OM	18	18	18	18	9	3
TE	—	—	—	—	—	—
TE(RM)	62	62	257	257	120	120
TE(YN)	35	26	91	55	40	14
RM	735	735	607	607	186	186
CT	380	380	333	333	130	130
YN	1702	1275	1162	700	578	200
PN	1573	787	647	647	152	114
MA	165	165	75	55	78	15
SK	1163	1163	684	684	270	180
DK	310	243	196	196	91	29
CS	1269	410	994	70	1057	52
SH	1234	300	708	200	109	31
JO	115	115	40	40	10	10
LI	168	32	82	8	31	2
DM	126	126	55	55	18	18
MU	142	142	132	132	40	40
MM	1465	1465	1244	1244	408	408
EN	1471	1105	893	600	665	55
MR	247	247	296	296	62	62
BT	1076	1076	969	969	254	254
EM	975	975	1071	1071	319	319
IC	292	292	306	306	98	98
ME	361	361	327	200	275	36
FP	498	350	299	230	156	156
DC	504	370	305	100	264	10
PM	31	31	22	22	3	3
ML	35	8	23	9	12	2
SV	80	10	25	25	6	6
CE	88	88	75	75	25	25
CD	499	150	209	105	143	42
CM	275	100	105	52	69	8
BU	247	200	171	130	51	51
SW	64	64	66	33	36	8
UT	74	74	60	60	28	28
AD	1868	1834	1106	564	1472	44
AT	549	549	822	822	154	154
AO	—	—	411	205	328	10
AOT	54	21	—	—	—	—
AOU	746	374	—	—	—	—
AQ	102	102	20	20	10	10
GF	46	46	7	7	12	6
AC	290	290	246	246	73	73
AB	—	—	460	180	136	68

This Will Give You

HERE ARE THREE TABLES which give you a rundown of the number of advancements authorized as a result of the August '57 examinations and the prospects for advancement as a result of the February 1958 service-wide examinations.

Table I contains the actual numbers of personnel by rating and pay grade who passed the examinations held in August 1957, and the number who were included in the quota for advancement to each rate on a service-wide basis.

Tables II and III contain estimates of the anticipated results of the February 1958 examinations. These estimates are based on available statistics, study of past performances, and a considered estimate of all the variables which might affect the number of personnel who may be included in the advancement quota. The information contained in Tables II and III is subject to change. However, it is accurate

Boilerman Course Revised, Radio Course Discontinued

One new Enlisted Correspondence Course is now available to all enlisted personnel and another has been discontinued.

The new course, **Boilerman 2**, (NavPers 91512-2), is a revised edition divided into six assignments as NavPers 91512-2. While the course is for USN and USNR personnel, it will be of special benefit to Naval Reservists who may take it for repeat Reserve credit and pick up 18 retirement points at the same time.

The course that has been discontinued is **Introduction to Radio Equipment** (NavPers 91406-C).

Augmentation Selection Board Names Reserves for Promotion

The names of 180 Naval Reserve and temporary officers recommended for permanent appointment in the Regular Navy by the Augmentation Continuing Selection Board have been announced.

Of the selectees, 143 are line officers with four of these in the Restricted Line. Thirty-seven are in the Staff Corps.

Those to receive appointments, providing they meet all administra-

You'll Odds on Advancement

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enough to give prospective candidates for advancement a good idea of their opportunities and the degree of competition expected.

If you take a close look at Table III you will notice that the opportunities for advancement as a result of the February exams are excellent. There is, however, a slight decrease in the over-all number of advancements that will be authorized in comparison to past advancements.

In addition to the regular February and August exams, two additional exams are given in May and November for selected pay grade E-4 personnel in order to provide additional petty officers in the ratings where they are most needed. It is anticipated that all candidates passing the May 1958 exams will be advanced to pay grade E-4.

Check the following tables and estimate your own chances. This should give you an added incentive to prepare for these examinations.

ive requirements, include: Line, 47; Line (Women), 10; Aviation Line, 82; Special Duty Law, four; Supply Corps, 13; Supply Corps (Women), one; Chaplain Corps, six; Civil Engineer Corps, four; Medical Service Corps, three; Nurse Corps, 10.

New Bluejackets' Manual Is Now Available

The new, completely revised fifteenth edition of the *Bluejackets' Manual* is now available.

More than a revision, this training handbook and recruit's guide has been restyled and rewritten.

The fifteenth edition has been compiled principally by and under the direction of CAPT John V. Noel, usn, assistant chief of Naval Personnel for special projects, assisted by LT Donald A. Franz, usn, of the Bureau's Training Division, and Chief Journalist William J. Miller, usn, of the Bureau's Enlisted Personnel Division. The project was accomplished by them on an independent, off-duty basis.

The revised edition is now available at Navy Exchanges, ship's stores or directly from the U. S. Naval Institute at Annapolis, Md.

TABLE I Cont.
ESTIMATES ON NUMBERS WHO WILL PARTICIPATE AND NUMBERS WHO WILL PASS FEBRUARY 1958 EXAMINATIONS

RATING	No. who passed	No. who may advance	No. who passed	No. who may advance	No. who passed	No. who may advance
	To E-4		To E-5		To E-6	
ABG	371	20	—	—	—	—
ABU	969	70	—	—	—	—
AE	580	580	493	493	102	102
AM	939	939	695	695	302	302
PR	196	196	65	65	59	59
AG	204	204	177	177	68	68
TD	119	119	123	123	45	18
AK	860	110	332	200	122	90
PH	—	—	192	192	122	92
PHA	112	60	—	—	—	—
PHG	412	210	—	—	—	—
HM	2904	1600	1295	500	1001	40
DT	453	100	399	150	96	22
SD	1294	40	893	26	660	20
TOTALS	36,297	23,313	25,585	17,070	13,959	4,833

TABLE II
ESTIMATES ON NUMBERS WHO WILL PARTICIPATE AND NUMBERS WHO WILL PASS FEBRUARY 1958 EXAMINATIONS

RATING	To Pay Grade E-4		To Pay Grade E-5		To Pay Grade E-6		To Pay Grade E-7	
	Take Exam	Will Pass	Take Exam	Will Pass	Take Exam	Will Pass	Take Exam	Will Pass
BM	3575	2225	2810	1355	3285	1465	3250	1055
QM	450	95	345	160	220	90	790	280
SM	495	315	410	200	190	85	330	130
RD	980	615	1245	560	445	170	325	130
SO	385	250	660	315	400	150	265	85
TM	330	195	380	215	435	160	670	270
GM	2200	1420	1830	990	1715	710	1805	705
GS	40	25	75	45	65	30	70	25
NW	No prediction in view of this being a newly established rating							
FT	—	—	1200	615	570	230	825	345
FTA	480	300	—	—	—	—	—	—
FTE	25	15	—	—	—	—	—	—
FTG	10	5	—	—	—	—	—	—
FTL	55	35	—	—	—	—	—	—
FTM	360	235	—	—	—	—	—	—
FTU	10	5	—	—	—	—	—	—
MN	180	125	245	120	125	50	95	35
ET	—	—	1355	680	690	255	1140	465
ETN	345	210	—	—	—	—	—	—
ETR	415	250	—	—	—	—	—	—
ETS	85	50	—	—	—	—	—	—
IM	60	40	65	35	30	15	40	15
OM	30	20	45	20	20	10	40	15
TE(RM)	100	60	455	255	240	120	190	45
TE(YN)	55	35	175	90	95	40	80	20
RM	1215	735	1250	605	525	185	795	305
CT	500	380	590	335	400	130	325	180
YN	2670	1700	2295	1160	1245	580	1320	465
PN	2500	1575	1330	895	415	150	410	140
MA	235	165	135	75	170	80	140	50
SK	1785	1165	1365	685	680	270	950	370
DK	500	343	440	195	215	90	295	90
CS	1965	1270	2135	995	2665	1055	2380	835
SH	2005	1210	1355	710	245	110	760	280
JO	200	115	85	40	25	10	30	10
LI	245	170	150	80	85	30	75	25

TABLE II Cont.
ESTIMATES ON NUMBERS WHO WILL PARTICIPATE AND
NUMBERS WHO WILL PASS FEBRUARY 1958 EXAMINATIONS

RATING	To Pay Grade E-4		To Pay Grade E-5		To Pay Grade E-6		To Pay Grade E-7	
	Take Exam	Will Pass	Take Exam	Will Pass	Take Exam	Will Pass	Take Exam	Will Pass
DM	200	125	105	50	45	20	35	15
MU	210	140	245	130	90	50	105	40
MM	2400	1340	2425	1245	975	410	1325	550
EN	2420	1470	1775	895	1455	665	2205	805
MR	445	245	505	295	140	60	150	60
BT	1925	1075	1948	969	595	255	830	275
BR	—	—	—	—	50	30	50	30
EM	1670	975	2105	1070	820	320	905	345
IC	470	290	695	305	245	95	120	50
ME	635	360	720	325	590	275	875	315
FP	895	495	615	300	355	155	390	140
DC	785	505	615	305	560	255	720	260
PM	45	30	45	20	10	5	10	5
ML	60	35	55	25	30	10	30	10
SV	125	80	55	25	15	5	10	5
CE	140	90	160	75	65	25	50	15
CD	590	500	430	210	325	145	160	70
CM	440	275	215	105	155	70	120	45
BU	430	245	340	170	125	50	105	40
SW	105	65	130	65	70	35	55	15
UT	130	75	120	60	65	30	35	10
AD	—	—	2270	1105	2890	1470	4250	1410
ADJ	1380	785	—	—	—	—	—	—
ADR	2025	1080	—	—	—	—	—	—
AT	—	—	1595	820	525	155	1020	260
ATN	210	285	—	—	—	—	—	—
ATR	395	250	—	—	—	—	—	—
ATS	25	15	—	—	—	—	—	—
AO	—	—	900	410	730	330	950	375
AOU	1230	735	—	—	—	—	—	—
AOT	90	55	—	—	—	—	—	—
AQ	—	—	35	20	20	10	240	110
AQB	50	30	—	—	—	—	—	—
AQF	105	70	—	—	—	—	—	—
GF	85	45	15	5	30	10	150	55
AC	—	—	370	175	160	75	230	100
ACR	45	30	10	5	—	—	—	—
ACW	145	115	145	60	—	—	—	—
ACT	240	150	10	5	—	—	—	—
AB	—	—	1005	460	475	135	340	120
ABG	550	370	—	—	—	—	—	—
ABU	1445	970	—	—	—	—	—	—
AE	—	—	1000	495	310	100	480	190
AEI	185	120	—	—	—	—	—	—
AEM	905	460	—	—	—	—	—	—
AM	—	—	1495	695	670	300	1280	430
AMH	635	335	—	—	—	—	—	—
AMS	1070	605	—	—	—	—	—	—
PR	—	—	145	65	155	60	255	70
PRM	240	155	No Prediction	—	—	—	—	—
PRS	75	45	No Prediction	—	—	—	—	—
AG	375	205	365	178	135	70	160	65
TD	—	—	305	125	135	45	155	60
TDR	90	55	—	—	—	—	—	—
TDI	100	65	—	—	—	—	—	—
AK	1315	860	705	330	290	130	310	115
PH	—	—	425	190	270	120	305	95
PHA	175	120	—	—	—	—	—	—
PHG	620	410	—	—	—	—	—	—
HM	4635	2905	3145	1295	2320	1000	2580	870
DT	775	455	740	400	245	95	335	130
SD	2110	1295	1940	895	1580	660	1490	560

Open Rates for Transfer To Regular Navy Announced

Here's the latest list of "open" rates in which Naval Reserve personnel on active duty may submit application for enlistment or reenlistment in the Regular Navy in the pay grade held.

If you're a Naval Reservist on active duty for 12 months or more, serving in one of the open rates (or a related emergency service rate), you may apply to the Chief of Naval Personnel (Attn: Pers B223) via your commanding officer for a change from USNR to USN in the same pay grade.

The rates listed as open in the most recent change to BuPers Inst. 1130.4D (which is concerned with the enlistment in the Regular Navy of Navy Reserve personnel serving on active duty) include:

Chief: RD, SO, RM, IC.

First Class: RD, SO, RM, CT, IC, AT, AQ, AE.

Second Class: QM, SM, RD, SO, ET, RM, CT, EM, IC, UT, AT, AQ, AE, AG.

Third Class: QM, SM, RD, SO, TM, GS, ET, OM, RM, CT, EM, IC, UT, AT, AQ, AE, AG, TD.

Pay Grade 3: FN, SN, AN, CN, HN, DN, TN.

Pay Grade 2: FA, SA, AA, CP, HA, DA, TA.

Pay Grade 1: FR, SR, AR, CR, HR, DR, TR.

If you're a Reservist interested in going Regular, and hold one of the eligible ratings listed above, take a look at BuPers Inst. 1130.4D (Change 1) for complete details. For the last word on open rates see BuPers Notice 1130 (20 December).

Mourning Badges Not Required on Uniforms

Mourning badges or bands will no longer be worn on the military uniform by members of the armed forces except in the following cases:

- It will now be up to the individual attending a civilian funeral to use his own judgment on whether he will or will not wear the mourning badge.

- Secretaries of the military departments will prescribe the wearing of the mourning band by escorts for a military funeral.

This information is contained in SecNav Notice 1020 of 26 Nov 1957.

Your NEC Code May Help You to Get Your Choice for New Duty

THE ODDS ARE PROBABLY 10 to 1 that you haven't heard of the *Manual of Navy Enlisted Classifications* (NavPers 15105A) and possibly 50 to 1 that you have never seen it. But this one book can mean the difference between choice duty and routine duty. The choice is up to you — based on what you've done in the past.

Take the time that this Bureau had a need for Spanish-speaking Sonarmen. It was an easy matter to run cards through PAMI to come up with the Sonarmen. But PAMI couldn't tell which of these men spoke Spanish. None had bothered to mention this accomplishment, so no Sonarmen were assigned the Specialist NEC code of ESX-9834 (Spanish Interpreter). Consequently a Spanish-speaking Sonarman was

not available for use. Most PAMI cards were simply blank.

There are other similar cases which would have involved choice duty and possibly you could have been the one to get it. But if you didn't, *you have no one to blame but yourself.*

The same applies to those who are carrying four zeros as a primary NEC.

If you qualify for one or more NECs listed in the *Manual of Navy Enlisted Classifications*, either within or outside your rating, then you should be assigned the NECs for which you qualify. If you do not qualify for an NEC as listed then you will be assigned four zeros.

Take the case of a Chief Yeoman who was graduated from the U. S. Naval School, Naval Justice. In this

instance, the chief might figure that court reporting is just part of his rate, so he doesn't mention this fact and is coded with four zeros as his primary NEC. Nothing could be further from right. And this is true of every other rating.

Anyone can tell what you do by looking at your rate. What they *can't* tell and what Bureau assignment officers want to know is *what else can you do?* There's only one way this can be done — let someone know, get it entered in your record and on your PAMI card.

How do you do this? For one thing, your service record, according to article B-2306 of the *BuPers Manual*, should be revised annually on 1 September; when you are detached, and when you report. Among the many things to be

TABLE III

ESTIMATES ON PERCENTAGES OF MEN PASSING FEBRUARY 1958 EXAMS WHO WILL BE ADVANCED

Rating	Advance- ments to Pay Grade E-4	Advance- ments to Pay Grade E-5	Advance- ments to Pay Grade E-6	Advance- ments to Pay Grade E-7	Rating	Advance- ments to Pay Grade E-4	Advance- ments to Pay Grade E-5	Advance- ments to Pay Grade E-6	Advance- ments to Pay Grade E-7
BM	3-10%	3-10%	3-10%	3-10%	BR	—	—	76-100%	51-75%
QM	76-100%	76-100%	76-100%	11-50%	EM	76-100%	76-100%	76-100%	51-75%
SM	76-100%	76-100%	76-100%	76-100%	IC	76-100%	76-100%	76-100%	76-100%
RD	76-100%	76-100%	76-100%	76-100%	ME	76-100%	51-75%	11-50%	3-10%
SO	76-100%	76-100%	76-100%	76-100%	FP	51-75%	51-75%	51-75%	11-50%
TM	76-100%	76-100%	11-50%	3-10%	DC	11-50%	11-50%	3-10%	11-50%
GM	11-50%	11-50%	3-10%	3-10%	PM	76-100%	11-50%	76-100%	11-50%
GS	76-100%	76-100%	76-100%	76-100%	ML	11-50%	3-10%	11-50%	11-50%
FT	11-50%	11-50%	11-50%	3-10%	SV	76-100%	76-100%	76-100%	76-100%
MN	3-10%	3-10%	3-10%	3-10%	CE	76-100%	76-100%	76-100%	76-100%
ET	76-100%	76-100%	51-75%	51-75%	CD	11-50%	11-50%	11-50%	76-100%
IM	11-50%	11-50%	11-50%	11-50%	CM	11-50%	11-50%	11-50%	11-50%
OM	76-100%	76-100%	11-50%	3-10%	BU	51-75%	51-75%	51-75%	76-100%
TE(RM)	76-100%	76-100%	76-100%	76-100%	SW	51-75%	51-75%	11-50%	76-100%
TE(YN)	11-50%	11-50%	11-50%	11-50%	UT	76-100%	76-100%	76-100%	76-100%
RM	76-100%	76-100%	76-100%	76-100%	AD	51-75%	11-50%	3-10%	3-10%
CT	76-100%	76-100%	76-100%	76-100%	AT	76-100%	76-100%	76-100%	76-100%
YN	51-75%	51-75%	11-50%	11-50%	AO	11-50%	11-50%	3-10%	3-10%
PN	11-50%	11-50%	51-75%	11-50%	AQ	76-100%	76-100%	76-100%	51-75%
MA	51-75%	51-75%	11-50%	11-50%	GF	76-100%	76-100%	11-50%	3-10%
SK	51-75%	51-75%	51-75%	11-50%	AC	76-100%	76-100%	76-100%	11-50%
DK	76-100%	76-100%	11-50%	11-50%	AB	3-10%	11-50%	11-50%	3-10%
CS	3-10%	3-10%	3-10%	3-10%	AE	76-100%	76-100%	76-100%	76-100%
SH	11-50%	3-10%	11-50%	3-10%	AM	76-100%	76-100%	76-100%	11-50%
JO	76-100%	76-100%	76-100%	11-50%	PR	76-100%	76-100%	51-75%	11-50%
LI	3-10%	3-10%	3-10%	3-10%	AG	76-100%	76-100%	76-100%	51-75%
DM	51-75%	76-100%	76-100%	76-100%	TD	76-100%	76-100%	51-75%	51-75%
MU	76-100%	51-75%	76-100%	76-100%	AK	3-10%	11-50%	11-50%	11-50%
MM	76-100%	76-100%	76-100%	51-75%	PH	11-50%	51-75%	11-50%	11-50%
EN	51-75%	11-50%	3-10%	11-50%	HM	51-75%	11-50%	3-10%	3-10%
MR	76-100%	51-75%	76-100%	51-75%	DT	11-50%	11-50%	3-10%	3-10%
BT	51-75%	76-100%	76-100%	51-75%	SD	3-10%	3-10%	3-10%	3-10%

checked is the correctness of your NEC codes. But if you figure your primary or secondary NEC is incorrect, now's the time to let your personnel office in on the information.

If you can speak, interpret or write a foreign language, that fact should be listed. If you attain additional skills through training, schooling, correspondence courses, etc., and are qualified in a particular field or trade, especially if it has no connection with your rate and have a certificate to back this up, have it entered in your record and pick up a secondary NEC to go along with it. The same goes for a specialty within your rate. And the next time

the Bureau is looking for someone in your rating group that can do some particular job, you might be the one selected.

This is how Data Processing in the Bureau gets orders issued in a hurry to those who qualify:

Suppose you are serving on board a destroyer in the Atlantic. The ship's personnel man will call you into the office and ask if you have any special qualifications other than the NEC that is carried in your record. It's to your advantage not to "just suppose" that it's correct. Take a look through NavPers 15105A and make sure.

If you do come up with another,

primary or secondary, the personnel man will make a miscellaneous entry on the daily diary, entering the additional code.

He will also record it on page four of your service record.

A copy of this daily diary is mailed each day to one of the fourteen PAMIs—in this case, the PAMI at ComServLant. The personnel man on your ship will retain the original of this diary until the end of the month, then mail it to ComServLant. When ComServLant PAMI receives the copy of the daily diary, it will make the necessary changes on the PAMI card it carries on you.

Should one of those choice billets be requested from Data Processing in the Bureau, the Bureau will send out a request, naming the qualifications necessary, to all the field PAMIs. Should it be one that calls for your qualifications, ComServLant may issue orders to your ship for your transfer.

So you can see that the only way the Bureau or your cognizant PAMI can get your qualifications is for you to start the ball rolling by talking to your personnel man.

Courses in Atomic Defense Engineering for CEC Personnel

Two newly established courses for training in the practical aspects of Atomic Defense Engineering are being offered by the Civil Engineer Corps Officers School, Port Hueneme, Calif. CEC officers, Regular and Reserve (active and inactive) as well as certain other individuals, are eligible.

The courses, **Atomic Defense Construction Engineering**, and **Structural Dynamics and Radiation Shielding**, are of two weeks' duration.

Minimum academic background required for admission is a bachelors degree in engineering or architecture and satisfactory background in atomic warfare defense (service school, correspondence, or on-the-job training).

The Atomic Defense Construction Engineering course is a prerequisite for the course in Structural Dynamics. Both courses are classified "Secret" and those ordered to the courses must be cleared for access to Secret material.

Convening dates are in the latest revision of BuPers Inst. 1500.25.

Navy Families Like Living in Okinawa

Contemplating duty in Okinawa? If you are, look up and smile, because that cloud has a silver lining according to living condition information submitted by Patrol Squadron Four.

The squadron has been operating out of Naha Air Base on this island in the Ryukyu chain for more than a year and the personnel feel qualified to comment on conditions there. They say that the Navy family on Okinawa today occupies modern, well furnished government homes. New and well equipped exchanges and commissaries, amply stocked with both American and Oriental merchandise, are located throughout the island. Also available to personnel stationed there and to the Navy families are swimming pools, an 18-hole golf course, excellent beaches, complete athletic programs, air-conditioned service clubs and all other facilities common to naval stations.

In contrast to the chrome and polish of the American Exchange are the winding noisy streets of Naha (rebuilt since World War II) and the colorful intriguing center of the native market. In shop after shop, sailors and their families examine materials for dresses and suits, cameras, china, lacquerware and souvenirs of the Orient. Bargains are galore and here the saying is particularly true that you can go broke saving money.

The island's geography affords many recreational advantages for

servicemen serving time there. White coral beaches found everywhere are ideal for swimming, boating and skin-diving. However, the high annual rainfall and the typhoon season make it impossible to call Okinawa a second Hawaii.

R&R flights are available to squadron personnel on the island to such liberty spots as Japan, Hong Kong, the Philippines or Taiwan. But liberty on the island receives a high rating. The tea houses are popular and many a sailor finds an evening of relaxation, tea and dancing at the famous "Tea House of the August Moon."

Off duty hours can also be utilized in hobbies in the squadron's well equipped shop. Wood working, metal craft and leather work keep many busy while others build model airplanes and Hi-Fi sets.

For the photo fan the island offers many subjects. The northern part of the island is relatively untouched, and here the Okinawan can be photographed against a backdrop of rice paddies and terraced fields, in a simple heritage, according to the Squadron's information sheet.

Putting all of this together you can expect to have a good tour of duty if ordered to Okinawa where ancient traditions of the Far East blend with the modern conveniences of the West.

A roundup on living conditions in Okinawa was published in the February 1957 issue of ALL HANDS.

The Latest Word on Overseas Transportation of Your Family

YOU'LL FIND THE LATEST WORD pertaining to transportation and logistic support of military dependents in overseas areas in BuPers Inst. 1300.26. This instruction applies to all naval personnel with dependents and whose permanent duty station is a military installation or activity permanently located at a land station outside the United States. It also applies to naval personnel attached to Fleet and mobile units homeported outside the continental United States.

Here's what 1300.26 has to say: Only authorized dependents will be transported overseas by the government.

In no event will your dependents be transported overseas unless you have a minimum of 12 months remaining on your overseas tour of duty *after* the arrival of your dependents. Requests for entry approval submitted to an overseas commander must contain a statement that you are in all respects eligible for transportation of dependents to the overseas area.

A standard uniform tour is the period of time established for duty at a specific location outside the continental United States for all military personnel. On permanent change of station, time creditable on a standard uniform tour begins with the day you depart from the United States and ends the day you return.

In getting down to definitions, 1300.26 tells who are, and who are not, authorized dependents.

Authorized dependents are:

- Military dependents authorized by law and regulations to travel overseas at government expense upon permanent change of station of their sponsor (that's you), and authorized by the appropriate military commander to be present in a military dependents' status.

Unauthorized dependents are:



"You told me to tie her up!"

- Dependents of a person in pay grade E-4 with four years or less service and pay grades E-3, E-2 and E-1.

- Dependents of personnel entitled to government expense travel who enter an overseas area *without* military authorization.

- Dependents who are acquired *without* military authorization when authorization is required.

- Dependents whose sponsor has insufficient obligated service to complete the prescribed tour.

If, in reading this, you find that your dependents are in the "unauthorized" class *because you don't have sufficient obligated service to complete your prescribed tour*, don't throw your hands up in the air and start counting your pennies just yet —there is still hope.

You can be reclassified by the appropriate military commanders as a member with authorized dependents when you attain the requirements of eligibility.

Here are some of the ways you can acquire sufficient obligated service to complete your overseas tour: by reenlisting, executing a voluntary agreement to extend your enlistment, or agree to remain on active duty.

"Sure," you say. "They get me to extend, and then don't approve entry of my dependents."

You have an out here, too. If you do agree to extend your enlistment for the primary purpose of acquiring sufficient obligated service to complete the overseas tour, it may be conditional to the extent that it is *subject to cancellation if your dependents' entry is not approved*. But make sure there is an entry in your service record to this effect as required by Art. C-1407(3), *BuPers Manual*.

If you have over 17 years' active duty and want to complete the maximum applicable prescribed overseas tour, you must sign an agreement on page 13 of your service record to remain on active duty if transferred to the Fleet Reserve. If you must extend your obligated service and want to be sure you receive maximum benefits such as reenlistment bonus, travel pay, and reimbursement for leave, you should check these directives:

- Regular Navy — Appropriate BuPers Inst. of the 1133 series.

- Fleet Reserve — Appropriate BuPers Inst. of the 1910.5 series.

- Naval Reserve — Appropriate BuPers Inst. of the 1910.5 and 1133 series.

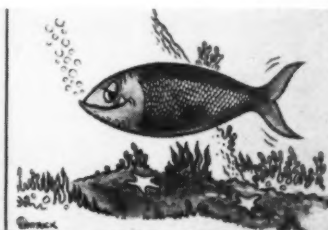
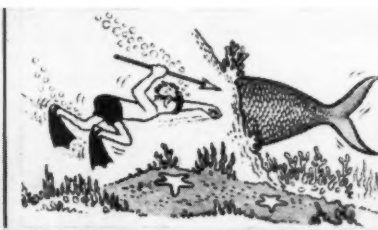
- Men entering the Navy through Selective Service System — BuPers Inst. 1133.8 series.

Reserve officers may request an extension of active duty from the Chief of Naval Personnel in order to acquire necessary obligated service.

Here are a couple of additional highlights taken from the instruction:

Unauthorized dependents on station on or before 6 Jun 1957 may be furnished "space available" transportation to the United States.

Unauthorized dependents who



entered an overseas area after 6 Jun 1957 may be furnished space available transportation to the United States if unused space occurs on government transportation which has been scheduled at the minimum to meet requirements for government expense travelers. They will not be assigned special priorities which interfere with timely movement of other "space available" travelers. You will bear financial responsibility of the return transportation of your dependents if they are in this category. And you should keep in mind that excessive delays may be expected before space available transportation will occur.

In wrapping this up, here is the latest information on logistic support of dependents:

Authorized dependents will con-

tinue to be provided logistic support as in the past.

Unauthorized dependents, if on station on or before 6 Jun 1957 will be identified as authorized dependents.

Others will be furnished all services provided for by law including medical service, and will be entitled to the same privileges as authorized dependents, including but not limited to PX and commissary facilities wherever these privileges are available for authorized dependents.

DIRECTIVES IN BRIEF

This listing is intended to serve only for general information and as an index of current Alnavs and NavActs as well as current BuPers Instructions, BuPers Notices, and SecNav Instructions that apply to most ships and stations. Many instructions and

notices are not of general interest and hence will not be carried in this section. Since BuPers Notices are arranged according to their group number and have no consecutive number within the group, their date of issue is included also for identification purposes. Personnel interested in specific directives should consult Alnavs, NavActs, Instructions and Notices for complete details before taking action.

Alnavs apply to all Navy and Marine Corps commands; NavActs apply to all Navy commands; Bupers Instructions and Notices apply to all ships and stations.

Alnavs

No. 54—Announced approval by the President of reports of selection boards which recommended USN and USNR line officers (men and women) to the grades of lieutenant and lieutenant commander.

No. 55—Expressed best Christmas wishes from the SecNav.

This Is the Tale of the Flying Bolt Who Went—

It's not often that we get an article about nuts and bolts that we think ALL HANDS readers will be interested in, but here's one with a nice twist. It appeared in the "Graphic View"—monthly newsletter put out by Heavy Photographic Squadron 61, serving with ComAirPac.

ONCE UPON A TIME there was a very tiny bolt (it wasn't so small when compared with the minute



bolts used in miniature instruments, but it was definitely tiny in comparison with the bolts located nearby). This bolt was one-fourth inch in diameter and one inch long, while most of those around it were much bigger around and a lot longer.

This made the little bolt feel insignificant and quite useless. It didn't add to tiny bolt's pride a bit, to know that it was only seldom, if ever, that someone looked at him to see if he was doing his job properly. In fact, tiny bolt felt lucky if someone bothered to check him as often as every sixty hours or so.

Every time tiny bolt saw a human hand tightening



or checking the bigger bolts around him, his pride was so wounded that he wished there was some way he could show his worth and make everyone sorry that they didn't pay more attention to him.

Tiny bolt vowed that some day, some way, he would "show them all" . . . and the only thing that held him back was his friend, a stop nut, that kept a firm grip upon tiny bolt and wouldn't let him do anything foolish or rash. Try as he may, though, tiny bolt couldn't convince stop-nut that the two should work in "cahoots" and throw a monkey wrench into the works. (You see, stop-nut was well adjusted and in spite of his small size, he realized his worth in the scheme of things.)

One day (and a sad day it was for tiny bolt), some human came along and transferred stop-nut. He removed stop-nut from his station next to tiny bolt and placed him in a tool box on top of a work stand.



Now this human had no intention of keeping stop-nut away from his friend tiny bolt for any length of time—just long enough to remove an item that stop-nut was standing in the way of.

When the human walked away and left stop-nut all by himself in the tool box, stop-nut shouted as loud as his little voice would allow, but to no avail—for the human was thinking of a cup of coffee and a cigarette—not about the fact that he had removed tiny bolt's only friend. The human didn't realize that

No. 56—Announced approval by the President of reports of selection boards which recommended USN and USNR officers for promotion to lieutenant commander in the Medical Corps, Supply Corps, Chaplain Corps, Civil Engineer Corps, Dental Corps, Medical Service Corps and Nurse Corps; to lieutenant in the Medical Corps, Supply Corps, Chaplain Corps, Civil Engineer Corps, Dental Corps, Medical Service Corps and Nurse Corps.

No. 57—Emphasizes that no member of a general or special court martial may consult the Manual for Courts-Martial during closed session of court.

No. 58—Announced change in commuted and leave rations for enlisted personnel, effective 1 Jan 1958.

BuPers Instructions

No. 1120.18E—Outlines eligibility requirements whereby USN personnel may seek appointment to commissioned status in the Regular Navy in either the Integration, LDO or Warrant Officer program.

No. 1300.26—Implements those parts of the Department of Defense instructions pertaining to transportation and logistic support of military dependents in overseas areas.

No. 1306.46A—Sets forth the policy relative to the administration of enlisted personnel serving in special weapons activities.

No. 1640.5—Defines the criteria for designation of a confinement facility.

BuPers Notices

No. 1133 (25 November)—Reem-

phasized the continuing need of Navy Career Appraisal Teams in the reenlistment program and outlined the concept of their occupational functions.

No. 1416 (27 November)—Announced Change No. 1 to BuPers Inst. 1416.4B, which is concerned with the professional fitness for promotion of Naval Reserve officers not on active duty.

No. 1223 (10 December)—Provided information concerning concepts established for an evolutionary revision of the enlisted rating structure.

No. 1130 (20 December)—Announced Change No. 1 to BuPers Inst. 1130.4D, which is concerned with enlistment in the Regular Navy of Naval Reserve personnel serving on active duty.

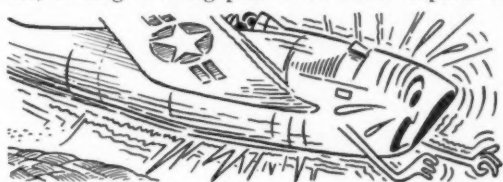
o Weuts—As Told to All Hands by a Navy Chief

stop-nut was the only one really close enough to tiny bolt to keep him in line—and keep him from taking the first chance to show his importance by running away from his job.

Ole "human" completely forgot about stop-nut. He glanced at stop-nut many times, lying there in the tool box, but never once did it dawn upon him that stop-nut had been removed from his natural habitat. Now tiny bolt had just the opportunity he had longed for—a chance to show the bigger bolts that in spite of their size and popularity among humans, he (tiny bolt, the tiniest bolt of them all), was of some importance too.

Tiny bolt waited for just the right situation to come along, where his absence would really make the humans and the larger bolts take notice. He went along with the program for several days, just as if

to whirl as he left the ground. He knew instinctively that this was his big moment—he twisted, turned, and strained and—without too much real effort on his part—he jumped right out of the fitting he was supposed to be holding down. Down and down he fell, landing in a big pool of oil inside a piece of



engine cowling. He lay there quite still, waiting for the inevitable.

The human sensed something wrong. He couldn't control the straining monster that was pulling him through the air—the monster lurched forward and started running wild—the human was doomed. The monster pulled him down to the ground at too great a speed and human, monster, and tiny bolt all perished in the resulting crash.

Naturally stop-nut attended the funeral of his friend tiny bolt—and as he left the chapel he was heard to say, "If I could only have been there with poor tiny bolt to hold him back. He was lost without me."

—R. W. Mills, ADC, USN.



he were perfectly happy to do his job without his friend stop-nut around.

Then one day he heard the human bragging about what a good job he always did and he heard other humans swallowing the story wholeheartedly. Now, said tiny bolt, now is the time. I'll not only show the big bolts, but I'll make a monkey out of this smug human at the same time.

Tiny bolt waited; he felt himself tugged and pulled upon, he felt his body tremble from the vibrations applied upon him, he felt his head start

Do You Know the Laws in Your Area on Car Ownership?

The car you call your own can be a beautiful acquisition as well as a vital necessity—but the problems of automobile ownership are many and varied. In addition to paying for and maintaining a car and staying out of accidents, which every car owner is faced with, the serviceman has to keep abreast of the varied laws of the different legal jurisdictions to which he is ordered.

Take the process of registering a car. A legal specialist in Navy JAG passes on this info. The Soldier's and Sailor's Civil Relief Act of 1940 (as amended) prohibits a state, in which a man is living solely because of military orders, from requiring registration if the car is properly registered in the state of his legal residence. However, some states say, if the car is registered in both the husband's and wife's names it must be registered in the state in which they are living or the registration changed to the name of the serviceman alone. They reason that the law provides protection only to the serviceman.

Compounding the problem, cer-

tain city or county governments require license plates issued by them for their jurisdiction if the car is registered in their state while others do not require local tags if the car carries a military installation pass. Other localities require that a serviceman's car carry a special license (issued free), even if it is registered out of the state while some require no local license at all.

Driver's license requirements vary from state to state. Most require only a valid license from the

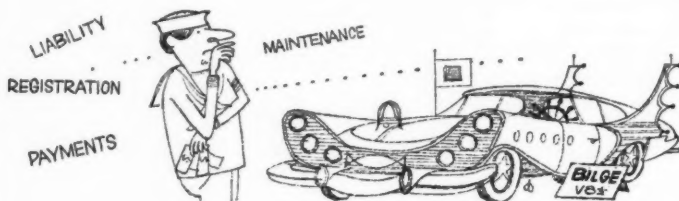
state in which the car is registered but there appears no reason why a state could not require a serviceman to obtain a driver's license, since this is an exercise of police power and not a tax. Dependents of service personnel face the same problem. Some states require that they obtain an operator's permit within a certain time while others accept any valid license.

Automotive inspection laws as passed in the various states usually apply only to cars registered locally, but in the exercise of police power there appears no reason why they could not be made to apply to all cars regardless of place of registration.

Financial responsibility laws requiring liability insurance under certain circumstances or proof of the ability to pay claims originating from an accident have been passed in various forms by all of the states. Massachusetts has a law requiring automobile insurance on all cars while other states require a showing of financial responsibility by persons who have been convicted of certain offenses. Another type of law in this category

is the "security type" act. This law requires the owner of a car involved in an accident where there are damages over a certain amount to show that he is financially able to pay claims which may be made against him.

Violation of any of these laws relating to automobiles, either through neglect or ignorance, can involve court costs and fines. Remember "ignorance of the law is no excuse." Seek advice from your local Legal Assistance Officer or the local motor vehicles office.



Navy's Underwater Demolition Training Is Realistic at Amphibious Base, Coronado

Night reconnaissance problems and reveille at 0600 with 45 minutes of calisthenics before breakfast aren't included in the schedule of any ordinary Navy training school. But it is part of the Navy's Underwater Demolition training program, one of the toughest courses offered anywhere.

On a recent Monday, 32 future "frogmen" and the underwater demolition instructor staff from the Naval Amphibious Base, Coronado, Calif., boarded landing ship tank USS *Tioga County* (LST 1158) off Southern California's Silver Strand. Carrying the full equipment necessary for a four-week training period, the group headed for the isolated camp-site on Clemente Island, 70 miles from San Diego.

The day after they sailed the trainees disembarked from the LST, trucked 17 miles to China Point, set up tents and were ready for the first training problem.

During the next month they were to participate in problems lasting until midnight or later, conduct hours of physical drill, and swim miles on reconnaissance and high-explosive demolition missions.

On the island, the future "frogmen" had their first actual contact with high explosives. Here they put classroom studies into actual use; cutting fuses, setting explosives on steel railroad rails, and placing demolition packs on underwater obstacles.

Daylight beach recon swims, using the unique "drop and pick-up" method for getting swimmers in and out of the water, are essential parts of the training. An LCPR (landing craft personnel, ramp), moving at high speed with a rubber boat lashed alongside, drops swimmers in pairs off the proposed recon area. They swim into the beach, making notes on slates of plexiglas concerning the depth of water, underwater obstacles or projections, nature of the beach floor and condition of surf.

Returning to the pick-up lane, the swimmers form a straight, evenly spaced line. They are literally snatched from the water by the "pick-up man" into the rubber boat pulled at high speed by the LCPR. As the craft approaches the waiting

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swimmers, the pick-up man passes a loop over the upraised arm of the swimmer, drawing him into the rubber boat.

After two weeks on the island, the trainees returned to the Amphibious Base at Coronado for one weekend, then went back to the island aboard USS *La Moure County* (LST 883). During the second two weeks of training on the island, the training class operated from the LST, conducting operations under the same conditions as if the ship had been a fast transport and San Clemente an enemy island.

After-dark problems, consisting of swimming recon, simulated enemy beach infiltration and demolition raids were nightly occurrence for the trainees. Each problem was preceded by a briefing given to the trainees, in which the situation was outlined, charts studied and the problem planned.

The IBS (inflatable boat, small) is used in all problems and the boat crews, composed of seven men, operate as a unit in all phases of the training.

The "buddy" system is rigidly enforced among the trainees, both for efficiency and safety. This means that two men operate together, always alert to each partner and ready to give assistance.

One night swimmer, heading toward the beach in the black darkness of a cloudy night, mistook a large sea lion for his "buddy." The seal roughed up the swimmer in a most "un-buddy" like manner, in its hasty departure.

The four-week training period on the island climaxed the greater part of the rigid 16-week training program. Fewer than 50 per cent of the trainees weather the course to graduate as Navy "Frogmen."

—Joe W. Bassett, SN, USN

More Petty Officers Promoted to Warrant Officer Grade

Thirty more petty officers have been issued temporary appointments to Warrant Officer, W-1.

Appointments include: Boatwain, 2; Surface Ordnance Technician, 2; Machinist, 1; Electrician, 1; Aviation Electronic Technician, 5; Communication Technician, 4; Electronics Technician, 3; Ship's Clerk, 3; Supply Clerk, 5; Dental Service Warrant, 1; Civil Engineer Corps, 2.

HOW DID IT START

Cumshaw

According to the "Almanac," monthly publication of USS *Bon Homme Richard* (CVA 31), not many people are familiar with the origins of the art of cumshaw. So, one of the Almanac's writers turned to and came up with a treatise on the subject which promises to add to the confusion.

Since most of the facts revealed by this seagoing historian are apparently brand new, the treatise is an item of considerable unimportance in historical circles. Therefore, to give you a chance to judge for yourself, here (in part) is what he says:

"Originally spelled kumshaugh, the art of cumshaw was founded in Scotland in the 15th century by the Earl of Malavah, a bit of a sneak thief and a porchclimber, who was killed one night while trying to barter the tartans of his clan for a racehorse. A noted Scotch poet recorded the event in his famous 'Ode to a Kumshaugh,' which begins with the immortal line: 'O ye brae the bonnie, and kumshaugh on the night.'

"Soon the term became a part of the sea. Old British mariners had an expression, 'Cox'n on kimshaugh,' which meant, 'Don't give the cox'n any food because he found no whales today.'

"Later, cumshaw spread to the New England whaling towns. When the great whaling fleets would set out on their long cruises the townspeople would gather on the wharves and piers and cry at the top of their lungs—'Forsaketh thou cumshaw and stab the whales.' The true origins of this expression have become obscure, but the noted historian, Arnold Whelp, feels that it means, 'Knock off the cumshaw and stick the whales.' It sounds plausible.

"In the Navy the first case of cumshaw as we know it today occurred in 1894, when an able seaman in the old light cruiser USS *Watts* traded, or cumshawed, 400 sacks of potatoes from USS *Tuber*. Most of *Watts'* crew subsequently expired of ptomaine poisoning, and from this incident comes the Navy expression, 'Don't cumshaw rotten potatoes.'

"Today the art of cumshaw is bigger than ever. Nary a day goes by on *Bon Homme Richard* when someone doesn't see something he wants and tries to obtain it by wit and wile. For instance, say you're down on the mess decks and you see a lemon pie left over from the noon meal. You want to share that pie with your friends back in the paper clip locker.

"There are a couple of ways to accomplish this. First, you can walk up, hook the pie and slip it inside your shirt. This isn't sporting—and it's kind of messy too—so you ask a cook. He says, 'Unh, unh,' which means 'no,' so you try the artist's



approach. You edge over to him and start a conversation with a gambit like this: 'Those pots sure are big, ain't they?'

"He'll ignore you.

"You guys sure keep 'em clean too,' you'll say.

"He'll still ignore you.

"Then, you'll play your trump: 'You ever need any paper clips—just come up and see me—I got tons of 'em. Just ask for Jones, Clip-Keeper, third.'

"At that the cook looks interested. 'Remember, Jones, CK3,' you say, 'By the way, how about that pie?'

"He turns his back. You've won.

"Another good cumshaw gambit runs something like this: 'Boy oh Boy! Did we get some hot stuff off the wireless.'

"The guy in charge of whatever it is you want will be dying to know what you're talking about, so you egg him on. 'Boy! This thing will really blow the roof off everything—I mean for all the married men on board.' (You happen to know this guy has a wife and seven kids.)

"The guy becomes frenzied and you know you've got him, so you say, 'I'll betcha if I had one of those gizmos on the shelf, I'd let you in on it.'

"Swiftly, he produces the gizmo and throws in an all-weather can-opener to boot. Then you can tell him anything—maybe some real hot news like, 'The AD is the workhorse of the Navy.'

"You've now got what you want, that's all that matters, for this is the real spirit behind cumshaw."

Editor's Note: In case you're interested in straight facts, Webster's big dictionary says the word "cumshaw" is a corruption of a phrase, meaning "grateful thanks," which is used by beggars on Amoy and in China. On Amoy the phrase is "kah sia" and in the Pekinese dialect it's "kan hsieh." It means "a present or bonus; a gratuity; a tip."

BOOKS: PLENTY OF VARIETY FOUND IN THIS MONTH'S SELECTION

THE SUBJECTS COVERED in the books selected for review by the Library Services Branch this month contain comedy, war, strategy, skin diving, foreign relations, mapmaking and the German navy.

Ensign O'Toole and Me, by CAPT William J. Lederer, USN. A new, hilarious, and partly serious skirmish and love affair with the United States Navy. It covers quite a range, up the Yangtze, down the China Sea, into the Pentagon, and roughshod through the Admiral's mess.

It is a saga of uproarious incidents and people. Much of it is concerned with Captain Lederer's friend and accomplice, Terrence O'Toole, the redhead whose exploits ranged from a wild bit of wartime espionage to an escapade involving a fortune teller in Manila, a beautiful girl, and a gross lie which resulted in Captain Lederer's marriage.

The Bridge at Remagen: The amazing story of the day we crossed the Rhine, by Ken Hechler. This volume, based on extensive interviews with German and American participants, is the first complete, authoritative account of what happened on that fateful day. It is the story of a great risk boldly accepted, and of the surprising way in which a relative handful of men, acting with daring and initiative, altered the course of history.

The Great Deterrent: A collection of lectures, articles, and broadcasts on the development of strategic policy in the nuclear age, by Sir John Slessor. This book covers an extremely wide range, both in time and subject matter. Taking as his starting-point the German plan for a European war made by von Schlieffen and the younger von Moltke in 1914, Sir John analyzes and discusses the strategical problems which followed the development of mechanized warfare and the subsequent growth of air power.

In these remarkably lucid and hard-hitting essays, he gives a parallel picture of progress in the world of strategy, and a clearly defined statement of current thought.

The Science of Skin and Scuba Diving: Adventuring with safety under water, developed by the Conference for National Co-operation in

Aquatics. Here is everything the skin diver needs to know about water skills and "watermanship" to insure safe and scientific diving as a hobby or sport.

Army and Navy authorities, medical specialists and experienced divers and trainers from all parts of the country present thorough, complete, medically sound and up-to-date information on every aspect of the sport.

Clear and authoritative information is provided on such subjects as: medical aspects of diving; gases used for Scuba; types of apparatus (including repair methods); currents, visibility, marine life; first aid for diving accidents (exhaustion, bends, marine life injuries, etc.); Scuba training techniques; buddy system, etc.

Professional and advanced divers, beginning students, teachers and anyone who wants to learn skin and Scuba diving can now possess the latest techniques and skills in the use of underwater gear from this fully illustrated manual. Each of the chapters is by a specialist in the subject discussed.

Japan between East and West: In this book, six experts, working with a study group of the Council on Foreign Relations, present their views on the future of Japan.

Hugh Borton, in his article *Politics and the Future of Democracy in Japan*, discusses the conflicts that are still raging over the continuation of many occupation reforms.

Communist exploitation is taken up by Paul F. Langer in *Communism*



"Get those heads up high—WAN TOOP
THUR-EEP—FA. . ."

in *Independent Japan*. Jerome B. Cohen deals with *International Aspects of Japan's Economic Situation*. In the section *Literary and Intellectual Currents in Postwar Japan and Their International Implications*, Donald Keene is the author. C. Martin Wilbur covers *Japan and the Rise of Communist China*.

In the final section of the book, William J. Jordan discusses *Japan's Diplomacy Between East and West*, as it is seen by the Communists, by the non-Communist world and by itself.

The Mapmaker: A novel of a great navigator who sailed 50 years before Columbus, by Frank G. Slaughter. Here is the story of Andrea Bianco (El Hakim), a real Venetian mapmaker whose brilliant navigation long before Columbus added so much to the fame of Portugal's Prince Henry the Navigator. True history is an integral part of every page — and so is romance, daring, and intrigue.

It has the promise of a battle at sea, of cutlass striking scimitar, of death and rescue, and a meeting with the beautiful Dona Leonor.

Der Seekrieg, The German Navy's Story 1939-1945, by Vice Admiral Friedrich Ruge, German Federal Navy. Beginning with a brief background of Germany's rise to a world sea power at the turn of the century, and its virtual banishment from the seas as a result of the First World War and the Treaty of Versailles, Admiral Ruge's book (translated into English it means *The Sea War*) tells how laboriously, yet efficiently the small corps of professional German naval officers worked to build up the navy of the German Republic which at a later date fell under the control of Adolf Hitler as dictator. Their labors were not made easier by the fact that the new dictator, Adolf Hitler, was landminded — a former soldier, who thought primarily in terms of huge armies and an all powerful air force, for whose men and weapons the naval establishment was penalized in every field.

Admiral Ruge sketches with bold strokes the country's headlong plunge into war — a war for which they knew the navy was not ready, and which Hitler had promised would not come for years, and even then, never against Great Britain, a leading sea power of the day. It makes good reading.

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BOOK SUPPLEMENT

FIGHTING THE U.S. NAVY



**A report on Admiral Farragut's passage of Forts Jackson and St. Philip, La.,
by Confederate Brigadier General Johnson K. Duncan, the man who tried to stop him.**

One of the Navy's most important victories of the Civil War was the capture of New Orleans in 1862 by the naval force under Flag Officer David G. Farragut, USN. The key to the city's defenses was a pair of Confederate forts—Jackson on the right bank of the Mississippi and St. Philip on the left—about eight miles above the shoal water at the mouth of the river.

Farragut's success in passing the forts, and the courage and daring which made the feat possible, earned him wide acclaim, but there was also plenty of courage on the part of the Confederate defenders, many of whom had seen little or no combat. The forts stood up under a terrific pounding by Union mortar boats. The river was high and the forts were partly flooded, so that the men in them were wet, sick and miserable most of the time. Eventually, they mutinied, but not until after Farragut had passed and their cause was lost.

A description of what it was like to be on the receiving end of Admiral Farragut's attack is related by extracts, freely revised, from the operational report of the man who commanded the forts, General Duncan.

ABOUT THE 27TH of March, I was informed by Lieut.-Col. Edward Higgins, commanding Forts Jackson and St. Philip, which composed a part of the coast defenses under my command, that the enemy's fleet was crossing the bars and entering the Mississippi river in force. Since I had always thought the attack on New Orleans would be made from that quarter, I repaired at once to Fort Jackson to assume general command. Upon my arrival, I found that Fort Jackson was suffering severely from the excessive rise in the river.

Despite every effort which could be made to stop it, the water kept increasing upon us until the parade-plain and casemates were very generally submerged to a depth

of from three to 18 inches. Only by isolating the magazines and by pumping day and night could water be kept out of them.

As the officers and men were all obliged to live in these open and submerged casemates, they were greatly exposed to discomfort and sickness. Their uniforms and feet were always wet. Fort St. Philip was in a similar condition, but to a lesser extent.

In preparation for the expected attack, it was necessary to bring in, mount and build platforms for the three 10-inch and three 8-inch columbiads, the rifled 42-pounder, and the five 10-inch sea coast mortars, recently obtained from Pensacola on the evacuation of that place, together with two rifled 7-inch guns, temporarily borrowed from the naval authorities in New Orleans. It was also found necessary to complete the old water battery, to the rear of and below Fort Jackson, for the reception of some of these guns. In addition, mortar proof magazines and shell rooms had to be constructed within the water batteries and all the main magazines at both forts had to be covered with sand bags to a considerable depth to protect them against a vertical mortar fire.

THROUGH GREAT EXERTIONS, cheerfully made by both officers and men, and working the garrisons by reliefs night and day, this work was all accomplished by the 13th of April. However, no sooner had the two rifled 7-inch navy guns been placed in position than orders arrived to dismount one of them and send it to the city at once to be placed on board the iron-clad steamer *Louisiana*. It was accordingly sent, but with great

From Reports of the Naval Engagements on the Mississippi River, Resulting in the capture of Forts Jackson and St. Philip and the City of New Orleans and the Destruction of the Rebel Naval Flotilla. Government Printing Office, Washington, 1862.



GLOWING PLACES — Failure of fire rafts set to drift into Union ships contributed to forts' downfall.

difficulty owing to the overflow and the other causes stated. The garrisons of both forts were greatly fatigued and worn out by these labors—performed under pressure, within sight of the enemy and under many discomforts and disadvantages caused by the high water.

In the meantime, I had called upon the general commanding the department, for two regiments to be stationed at the quarantine buildings, six miles above the forts, to act as a reserve force and to cooperate with the forts in case of a combined land and water attack. I also asked for Capt. W. G. Mullen's company of scouts and sharpshooters to be stationed in the woods below Fort Jackson, on the right bank of the river, for the purpose of picking off officers and men from the enemy's vessels when these ships assumed their positions of attack. Capt. Mullen's company of about 125 men was sent down as requested and stationed, in part, in the point of woods below Fort Jackson. The remainder were stationed on the Fort St. Philip side, opposite the raft obstructing the river. The Chalmette regiment, consisting of about 500 men, Col. Syzanskié commanding, was sent to the quarantine. A part of it was stationed there, and company detachments were placed at the head of the several canals, leading from the river into the back bays, to guard against a land force above us.

Four steamers of the river fleet—*Warrior*, *Stonewall Jackson*, *Defiance* and *Resolute*—protected, and to a certain extent made shot-proof with cotton bulk-heads, and prepared with iron prows to act as rams, were sent down to cooperate with me. The steamers *Governor Moore* and *General Quitman*, similarly prepared, were sent down in like manner to cooperate with the forts and ram such vessels of the enemy as might succeed in passing. The naval authorities also sent down the C. S. steam ram *Manassas*, which was stationed a short distance above Fort Jackson with her steam up constantly, to act against the enemy as occasion might offer. Subsequently, the C. S. Steamer *Jackson* also arrived.

A raft of logs and chains, which had formerly been placed across the river, had proven a failure, so a new obstruction had been placed across the river, opposite Fort Jackson, by Lieut.-Col. E. Higgins. This consisted of a line of schooners, anchored at intervals with bows up stream and chained together amidships as well as stern-and-stem. The rigging, ratlines and cable were left to trail astern of the schooners as an additional impediment to tangle in the propeller wheels of the enemy. The schooner raft was seriously damaged by a wind storm on the 10th and 11th of April which parted the chains, scattered the schooners and materially affected its effectiveness as an obstruction.

In addition to this, the raft was also badly damaged when some of the fire barges got loose and drifted against it. A large number of these fire barges were tied to the banks above both forts, ready at all times to be towed into the current and against the enemy. This was for a double purpose—firing his ships and lighting up the river by night to insure the accuracy of our fire. My in-

structions to the river fleet were to be in the stream above the raft to assist the forts with their fire and to turn in and ram, at all hazards, all vessels that might succeed in getting above the raft. The fleet was also required to take control of the fire barges, reconnoiter the enemy above the head of the passes and keep a watch boat below every night, near the point of woods, to signal the approach of the enemy.

WHILE THE ENEMY remained at the Head of the Passes, 22½ miles below the forts and, later, when he came to the Jump, or Wilder's Bayou, the boats of the river fleet took turns in running down and watching his movements. For a few nights, at this time, one of them was also kept below as a guard boat. We also had telegraphic communication down to within half a mile of the Jumps, (nine miles below the forts). This, together with scouts operating in the bays to the east and west of the river in skiffs and pirogues, kept us posted on the enemy's movements below as far down as the Southwest Pass.

Meanwhile, the enemy was not idle. His large vessels were worked over the Southwest bar, after failing to make an entrance at Pass a l'Outre, and the mortar fleet was brought up as far as the Southwest Pilot Station, where the mortars were scaled and afterwards tested. From seven to 13 steam sloops of war and gunboats were constantly kept at the Head of the Passes or at the Jump to cover the operations below and prevent our observing his movements on the river. By gradual and regular approaches he carefully closed up to the forts day-by-day and opened his attack.

On April 9 one of our reconnoitering steamers was chased and followed up by two of the enemy's gunboats as far as the point of the woods below Fort Jackson, but the gunboats were soon forced to retire by a few shots from our batteries. This was his first reconnaissance, and our fire was not returned.

On April 13 several of the hostile gunboats came up to make observations. They would occasionally show themselves singly or in pairs, above the point of woods, then exchange a few shots with the forts and retire again behind the point. Our sharpshooters obtained a few shots on this occasion, but without much effect. Many of the men were up to their waists in water. In consequence, sickness prevailed among them and unfitted them for duty.

The enemy spent the principal part of the 13th in firing grape and canister, and in shelling the woods to drive the sharpshooters out. This was repeated the following day, the enemy not coming within range or sight of the forts but confining himself to shelling the woods below. The sharpshooters were all driven out by this second day's firing. Our telegraphic communication below was also broken up, as the wires were removed and many of the posts cut and torn down by the enemy.

Since there was no other point, above or below, where the sharpshooters could profitably act in that capacity and, since many of them were unfit for duty from exposure, I decided to send them to the city, which was accordingly done.

TO KEEP UP telegraphic communication below, Lieut. T. J. Royster's company, sappers and miners, 24th Regiment, Louisiana Volunteers, offered his services with 15 men of his company to act as sharpshooters in pirogues, covering the operator while he repaired the

line and re-established the connection with the forts above. This also failed, because it was so difficult to manage the pirogues effectively in the dense undergrowth of the swampy woods below. As a result, the telegraph and sharpshooters had to be abandoned.

On April 15th the enemy brought up his whole fleet, extending it from the Head of the Passes to the Point of Woods below the forts. Orders were repeatedly given to the river fleet to send the fire barges down nightly, but the barges were cut adrift too soon, so that they drifted against the banks directly under the forts, fired our wharves and lit us up while obscuring the position of the enemy.

On April 16th from 7:30 A.M. on, the enemy's gunboats came round the point repeatedly for observation, but were invariably forced to retire by our fire. In the meantime, he was locating the position of the mortar flotilla, composed of 21 schooners, each mounting one 13-inch mortar, plus other guns. The flotilla was close against the bank on the Fort Jackson side, and behind the point of woods.

At 4:30 P.M. the enemy ran out a gunboat and fired upon the fort, under cover of which two mortar boats were brought out into the stream. These boats opened fire upon Fort Jackson at 5:00 P.M. and continued firing for an hour and a half. Then, under our fire, the enemy retired behind the point of woods.

One fire barge was sent down successfully against the enemy at 4:00 A.M. It drifted in among his vessels and created considerable confusion when it was fired upon by them. During the day, Capts. Renshaw, Kennon, Seant, Stephenson and Hooper passed in turns with their boats below the raft (now very much disconnected and scattered) and exchanged a few shots with the hostile gunboats and mortar-boats.

Two more abortive attempts were made to send down fire-barges against the enemy during the night.

ON APRIL 18th at 9:00 A.M., the enemy opened upon Fort Jackson with his entire mortar fleet of 21 vessels

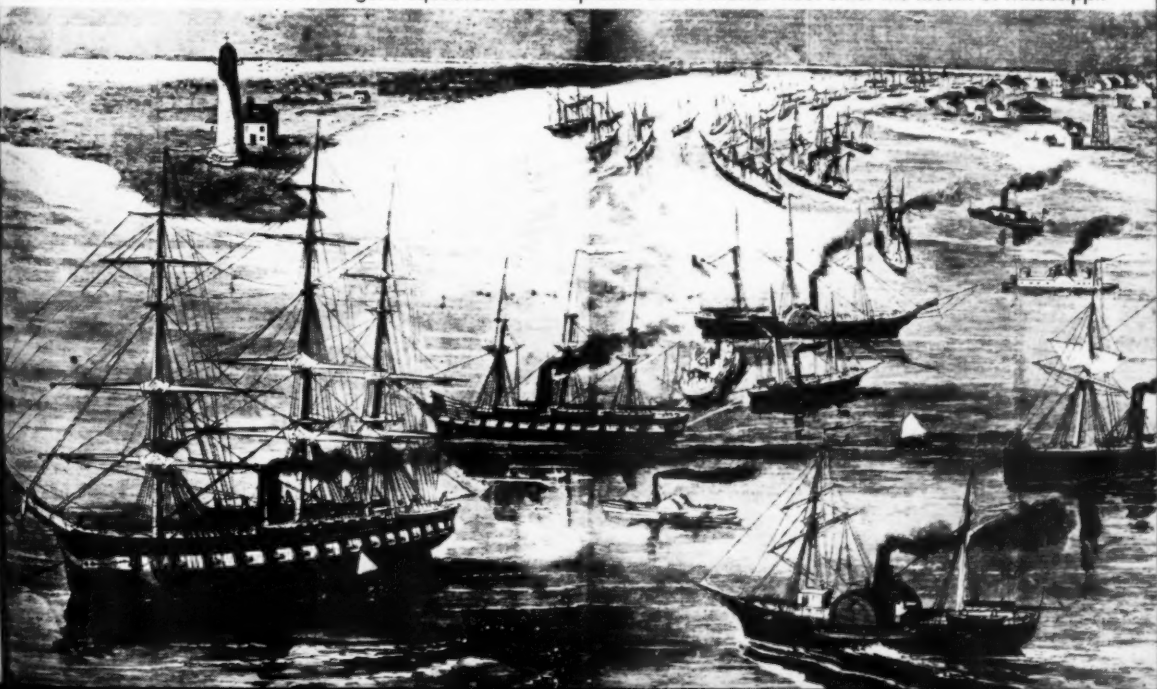
and rifled guns from his gunboats. Fifteen of them were concealed behind the point of woods and the other six were hauled out in the stream at an angle with them just at the extreme range of our heaviest guns. Our fire disabled one gunboat and one mortar-boat, causing those in the stream to retire behind the cover of the woods, but generally our shots fell short for lack of elevation caused by the inferiority of our powder. Even our nearest gun—a 10-inch sea-coast mortar—would not reach his boats with the heaviest charges. The enemy ceased firing at 7:00 P.M., having fired this day 2,997 mortar shells.

The quarters in the bastions were fired and burned down early in the day, as were the quarters immediately outside the fort. The citadel was set on fire several times during the day. At first, the fires were extinguished, but later it became impossible to put out the flames. When the enemy ceased firing the citadel was one burning mass, greatly endangering the magazines. Many of the men and most of the officers lost their bedding and clothing in these fires, which greatly added to the discomforts caused by the flooding. The mortar fire was accurate and terrible, many of the shells falling everywhere within the fort, and disabling some of our best guns.

During the night the enemy sent up two launches to examine the character of the raft obstructing the river.

On April 19th the mortar fleet again opened fire at 6:30 A.M., and the fire was constantly kept up throughout the day. Gunboats constantly came above the point during the day to engage the forts, but were as constantly driven back by our fire. One of them which we crippled was towed behind the point of woods. The enemy's fire was excellent, a large proportion of his shells falling within Fort Jackson. The terreplein, paradeplain, parapets and platforms were very much cut up and the casemates were severely damaged. The magazines were considerably threatened and one shell passed through into the casemates containing fixed ammunition. In addition, the enemy's fire disabled one 10-inch and one 8-inch columbiad, one 32 and one 24-pounder and

UP THE RIVER — Commodore Farragut's squadron and Captain Porter's mortar fleet enter the mouth of Mississippi.





UNION GUNS inflicted great damage to interior of Fort Jackson during the eight-day bombardment.

one 10-inch siege mortar in the main work, plus two 32-pounders in the water battery.

On April 20th there was some rain in the morning and the wind was very high. Bombardment was constant throughout the day with occasional shots from gunboats around the point. Between 11:00 and 12:00 P.M., under cover of the heaviest shelling thus far, one of the enemy's gunboats came up in the darkness and attempted to cut the chains of the raft and drag off the schooners. A heavy fire was opened upon her, but she did not retire until she had partially accomplished her purpose. After this, the raft could not be regarded as an obstruction. The fire continued without interruption all night.

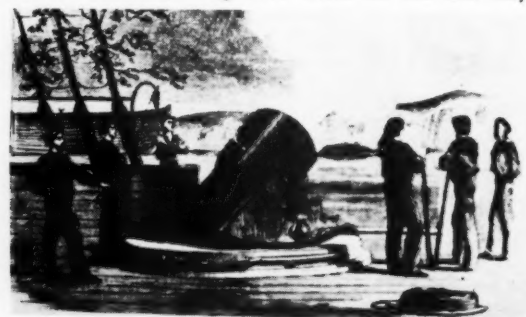
On April 21st firing continued all day and all night without interruption. By this time, Fort Jackson was in need of extensive repairs almost everywhere.

ON APRIL 22nd bombardment continued during the day and night, being at times very heavy. During the day our fire was principally confined to shelling the point of woods from both forts, and with apparently good results, as the mortar-fire was slackened toward evening. The casemates were very much cut up by the enemy's fire, which was increased at night. There was little or no success in sending down fire barges, owing in part to the condition of the towboats.

On April 23rd, a warm, clear and cloudless day, the entire command was turned out to repair damages under very heavy enemy fire. The bombardment continued without intermission throughout the day, but slackened off about noon when there was every indication of an exhaustion on the part of the mortar flotilla. Hence it became evident that the tactics of the enemy would be changed into an attack with broadsides by his larger vessels.

Just before sundown, under a very heavy mortar fire, the enemy sent up a small boat and a series of white flags were planted on the Fort St. Philip bank of the river, commencing about 380 yards above a lone tree

MORTAR FLOTILLA delivered heavy and accurate fire on Fort Jackson, firing 2997 shells on the first day.



on that shore. This confirmed my previous views of an early attack, different from the usual mortar bombardment, since I presumed that these flags indicated positions to be taken up by the several vessels in their new line of operation.

THE BOMBARDMENT CONTINUED all night, and grew furious towards morning.

At 3:30 A.M., April 24th, the larger vessels of the enemy were observed to be in motion and, as we had presumed, took up the positions indicated by the small flags planted the previous evening.

The enemy evidently anticipated a strong demonstration to be made against him with fire-barges. Finding upon his approach, however, that no such demonstration was made, and that the only resistance offered to his passage was the expected fire of the forts (the broken and scattered raft was by then no obstacle) I am satisfied that he was suddenly inspired to run the gauntlet at all hazards, although this was not a part of his original design. Be this as it may, a rapid rush was made by him, in columns of twos in echelon so as not to interfere with each other's broadsides. The mortar fire was furiously increased upon Fort Jackson, and in dashing by, each of the vessels delivered broadside after broadside of shot, shell, grape, canister and spherical case, to drive our men from the guns.

Both the officers and men stood up manfully under this galling and fearful hail. The batteries of both forts promptly opened at their longest range, with shot, shell, hot shot and a little grape, and the guns were most gallantly and rapidly fought until the enemy succeeded in getting above and beyond our range.

IN THE DARKNESS on the river and the smoke of the guns scarcely a vessel was visible. In consequence, the gunners had to govern their firing entirely by the flashes of the enemy's guns. I am fully satisfied that the enemy's dash was successful mainly because of the cover of darkness, since a frigate and several gunboats were forced to retire as day was breaking. Similar results had attended every previous attempt made by the enemy to pass or reconnoiter, when we had enough light to fire with accuracy and effect. The passage was of short duration, having been accomplished between 3:30 A.M. and daylight, under a very rapid and heavy pressure of steam.

DEFIANCE, Capt. McCoy, commanding, was the only vessel saved out of our river fleet. Shortly after daylight, *Manassas* was observed drifting down by the forts. She had been abandoned and fired, and was evidently in a sinking condition. *McRae* was considerably cut up in this action by shot and grape. *Resolute* was run on shore about a mile above the forts, where she hoisted a white flag, but by the prompt action of *McRae*, she was prevented from falling into the hands of the enemy. She was later wrecked and burned. *Warrior* was run ashore and fired, on the point just above Fort St. Philip.

Nothing was known by us of the movements of *Stonewall Jackson*, Governor Moore or General Quitman. The steamers *Mosher*, *Music* and *Belle Algerine*, in charge of the fire-barges, were all destroyed, as was *Star*. The heroic courage displayed by the officers and men at both forts was deserving of a better success, especially after the fortitude they had exhibited through the long tedium of a protracted bombardment—unsurpassed for its terrible accuracy, constancy and fury.

Thirteen of the enemy's vessels out of 23, succeeded

in getting by—USS *Hartford*, *Pensacola*, *Richmond*, *Brooklyn*, *Mississippi*, *Oneida*, *Iroquois*, *Cayuga*, *Wissabickon*, *Sciota*, *Kineo*, *Katabdin* and *Pinola*. In addition to these, and to *Verona* and such other vessels as were sunk, there were six gunboats and one frigate engaged in this action besides the mortar flotilla. Heavy chains were flaked along the sides of most of these vessels as an iron-proof protection.

The vessels which passed all came to anchor at or below quarantine, six miles above the forts, where they remained until about 10:00 A.M. Then, except for two gunboats left at the quarantine as a guard, they all passed slowly up the river.

Shortly after the first fleet got underway, a gunboat from below made her appearance with a flag of truce and verbally demanded the surrender of the forts, in the name of Commander David D. Porter, USN, commanding the mortar flotilla. The demand was rejected and the bombardment was reopened about noon.

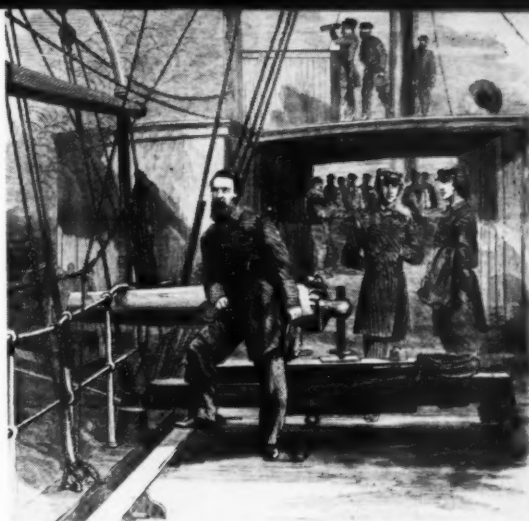
On April 25th the enemy made no attack during the day, either from above or below.

PERMISSION WAS GRANTED by the enemy to the Confederate States Steamer *McRae* to proceed to New Orleans under a flag of truce with the wounded. The seriously wounded of both forts were sent on board her and she got off the next morning.

On April 26th a gunboat with a white flag dropped down from the quarantine to escort *McRae* on her mission. She did not again return to the forts. Four of the enemy's steamers were in sight at the quarantine at dawn and a gunboat occasionally showed herself below to reconnoiter. In the direction of Bird Island and back of the salt works, a large steam frigate and an ordinary river steamer appeared in sight, the latter working her way up the bay behind Fort St. Philip. Apparently towards the quarantine. During the day CAPT. John K. Mitchell, commanding the C. S. Naval Forces, Lower Mississippi, communicated with the enemy above under a flag of truce and learned that the city had surrendered. The Confederate States steam ram *Mississippi* had been burned by our authorities. The wreck of the floating dock or battery drifted by the forts about 4.00 P.M.

At daylight on April 27th the steamer which had been observed the day before working her way up in the back bays was in view immediately in the rear of Fort St. Philip and near the mouth of the Fort Bayou. A frigate and five other vessels were also in sight toward Bird Island. One of them was seen working her way up the bay. From 10 to 13 launches were visible near the boat back of Fort St. Philip, by means of which troops were being landed at quarantine above us. About noon one of the enemy's gunboats from below made her appearance under a flag of truce, bearing a written demand for the surrender of the forts, signed by Commander Porter.

SO FAR, THROUGHOUT THE ENTIRE bombardment and final action, the spirit of the troops was cheerful, confident and courageous. A reaction set in among them during the lull of the 25th, 26th, and 27th, when there was no other excitement to arouse them than the fatigue duty of repairing our damages, and when the rumor was current that the city had surrendered and was in the hands of the enemy. No reply to my dispatches had been received from the city. The troops were still obedient, but not buoyant and cheerful. I published an order de-



MORTAR MAN — Captain Porter, commanding officer of the mortar fleet, watches the battle from his flagship.

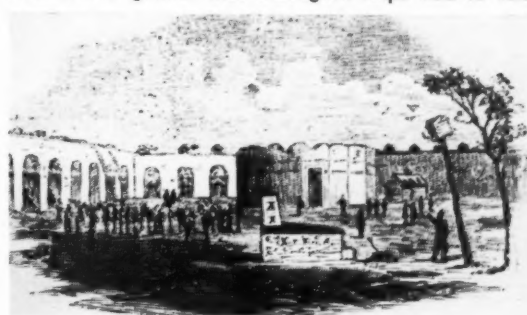
signed to revive their courage and patriotism, but I regret to state that it did not produce the desired effect. Everything remained quiet, however, until midnight, when the garrison at Fort Jackson revolted en masse, seized upon the guard and posterns, reversed the field-pieces commanding the gates and commenced to spike the guns.

In the meantime we were totally ignorant of the condition of affairs in Fort St. Philip. As all of our small boats had been carried away by the mutineers, we could not communicate with that fort until the next morning. Since the next attack upon the forts was likely to be a combined operation by land and water and as Fort St. Philip was the point most threatened, it was self-evident that no reduction could be made in its garrison to strengthen that of Fort Jackson, even if all the men there remained true. With the enemy above and below us there was no chance of destroying the public property, blowing up the forts and escaping with the remaining troops, owing to the nature of the surrounding country.

Under all these humiliating circumstances, there seemed to be but one course open—to await the approach of daylight, communicate with the gunboats of the mortar flotilla below and negotiate for a surrender under the terms which had previously been declined.

On April 28, after a discussion among the officers, a flag of truce was sent down to the Union forces—and a surrender was negotiated.

ACROSS THE RIVER — Fort St. Philip was on the other side of the gantlet that Farragut's ships had to run.



TAFFRAIL TALK

WE HAVE A NEW CHIEF OF NAVAL PERSONNEL this month of February, 1958. We'd like to introduce him to you and to say goodbye for you—and—us—to the outgoing Chief.

Assuming the post of Chief of Naval Personnel and Deputy Chief of Naval Operations (for Personnel and Reserve Forces) is Vice Admiral Page Smith, usn. VADM Smith comes to his new billet after having served as Chief of Staff and Aide to the Supreme Allied Commander, Atlantic. He has served in many ships—IDAHO, ARIZONA, NEVADA, FARRAGUT, MARBLEHEAD, STEWART, DUNLAP. His last ship command was the famous fast battleship Missouri. He has taught at the Naval Academy. He has commanded a destroyer division and a destroyer squadron. Some of his other posts have included that of being Deputy Comptroller of the Navy; Director of Foreign Military Affairs in the Office of SecDef; Deputy Chinfo; and Navy member of the Joint War Plans Committee of the Joint Chiefs of Staff.



VADM Smith

Among VADM Smith's decorations and medals, which include the Navy Cross, it is noted that he qualified for expert rifle and expert pistol. It was with larger bore weapons, however, that he fought his destroyer, *uss Stewart*, one night just 16 years ago this month. And he and his shipmates were up against still larger guns—they took on a Japanese cruiser.

That, in brief, is your new Chief of Naval Personnel.

Now wearing four stars and taking over as Commander in Chief, U. S. Naval Forces, Eastern Atlantic and Mediterranean (CINCNELM) is Admiral James L. Holloway, Jr., usn. "Mr. Training" of the Navy for the past 20 years; author of the famed "Holloway Plan"; prime mover of scientific and battle readiness training ("We go out ahead of the drawing boards," he said, to explain that Navy training is staying ahead of Navy scientific advances); Admiral Holloway hardly needs an introduction to you, unless you're quite new to the Navy. Always a believer that "a taut ship is a happy ship," Admiral Holloway has been a firm believer in discipline throughout his career. Without discipline you do not have leadership; without leadership, you do not have true command, that is the way the admiral has expressed it. And he has insisted, in every ship and station, that his petty officers exercise leadership. He's a bluejacket's admiral.



ADM Holloway

Admiral Holloway has had a long and distinguished career. He has seen a lot of this Navy. He has confidence in the Navy and in the battle readiness of the Navy. He goes to his new post as CINCNELM with that confidence. We have a hunch that our Allies over there are going to learn about that confidence, too.

So, ALL-HANDS says goodbye to "Lord Jim." That's what the midshipmen at the Naval Academy named him—for his courtly manners and scholarly speech.

Look at the top of the masthead on page one. There's a new name there. He's your Chief of Naval Personnel now. And he's our new "publisher." He carries on his predecessor's command to the staff of ALL HANDS: "Keep her so."

The United States Navy Guardian of Our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends. The United States Navy exists to make it so.

We Serve with Honor

Tradition, valor and victory are the Navy's heritage from the past. To these may be added dedication, discipline and vigilance as the watchwords of the present and future. At home or on distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families. Our responsibilities sober us; our adversities strengthen us.

Service to God and Country is our special privilege. We serve with honor.

The Future of the Navy

The Navy will always employ new weapons, new techniques and greater power to protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war. Mobility, surprise, dispersal and offensive power are the keystones of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past. Never have our opportunities and our responsibilities been greater.

ALL HANDS the Bureau of Naval Personnel Information Bulletin, with approval of the Bureau of the Budget on 23 June 1955, is published monthly by the Bureau of Naval Personnel for the information and interest of the naval service as a whole. Opinions expressed are not necessarily those of the Navy Department. Reference to regulations, orders and directives is for information and does not by publication herein constitute authority for action. All original material may be reprinted as desired if proper credit is given ALL HANDS. Original articles of general interest may be forwarded to the Editor.

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The Bureau invites requests for additional copies as necessary to comply with the basic directive. This magazine is intended for all hands and commanding officers should take necessary steps to make it available accordingly.

The Bureau should be kept informed of changes in the number of copies required.

The Bureau should also be advised if the full number of copies is not received regularly.

Normally copies for Navy activities are distributed only to those on the Standard Navy Distribution List in the expectation that such activities will make further distribution as necessary; where special circumstances warrant sending direct to sub-activities the Bureau should be informed.

Distribution to Marine Corps personnel is effected by the Commandant U. S. Marine Corps. Requests from Marine Activities should be addressed to the Commandant.

PERSONAL COPIES: This magazine is for sale by Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. The rate for All Hands is 25 cents per copy; subscription price \$2.50 a year, domestic (including FPO and APO addresses for overseas mail); \$3.25 foreign. Remittances should be made direct to the Superintendent of Documents. Subscriptions are accepted for one year only.

• **AT RIGHT: MEDAL MAN**—Lawrence W. Beckhaus, GM2, USN, is admired by his daughters after receiving Navy and Marine Corps Medal for rescuing a sailor washed overboard from a destroyer in the stormy Atlantic.

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**GOING PLACES
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